

## MINIMUM TECHNICAL SPECIFICATIONS REQUIRED FOR THE SECURITY GADGET

| <b>TECHNICAL SPECIFICATION FOR 4/8/16 CHANNEL STAND ALONE TRIBRID<br/>DIGITAL VIDEO RECORDER (DVR)</b> |                                 |                                                                                                             |                                      |                                      |                                                   |
|--------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------------------|
| <b>Sr No</b>                                                                                           | <b>Parameters</b>               | <b>Specifications</b>                                                                                       |                                      |                                      | <b>Remarks</b>                                    |
| 1                                                                                                      | Video compression               | 4-Channel                                                                                                   | 8-Channel                            | 16-Channel                           | All has to be Min 2 MP HD DVR's                   |
|                                                                                                        |                                 | H.264 High Quality Decoding                                                                                 |                                      |                                      | Must be Min 2 MP HD DVR's                         |
| 2                                                                                                      | Analog and HD-TVI video input   | 4-Channel                                                                                                   | 8-Channel                            | 16-Channel                           | Min required Resolution 1080 x 720                |
|                                                                                                        |                                 | BNC interface (1.0Vp-p, 75 Ω)                                                                               |                                      |                                      | Full Copper Wired BNC                             |
| 3                                                                                                      | Supported camera types          | AHD, TVI, Existing Analog Camera, IP, 720P/25, 720P/30, 720P/50, 720P/60, 1080P/25, 1080P/30, CVBS cameras, |                                      |                                      |                                                   |
| 4                                                                                                      | IP video input                  | 1-Channel<br>(total upto 5 Channel)                                                                         | 2-Channel<br>(total upto 10 Channel) | 2-Channel<br>(total upto 18 Channel) |                                                   |
|                                                                                                        |                                 | <b>Min 2 MP resolution</b>                                                                                  |                                      |                                      |                                                   |
| 5                                                                                                      | Audio compression               | G.711u                                                                                                      |                                      |                                      |                                                   |
| 6                                                                                                      | Audio input / Two-way audio in  | 4-Channel                                                                                                   | 8- Channel                           | 16 -Channel                          |                                                   |
|                                                                                                        |                                 | (2.0 Vp-p, 1 KΩ), Min 1-Max 4 Audio inputs                                                                  |                                      |                                      |                                                   |
| 7                                                                                                      | HDMI / VGA output               | 1920 × 1080 / 60 Hz, 1280 × 1024 / 60 Hz, 1280 × 720 / 60 Hz, 1024 × 768 / 60 Hz                            |                                      |                                      |                                                   |
| 8                                                                                                      | Encoding resolution             | Main stream: 1080P(non-real-time) / 720P / VGA / WD1 / 4CIF / CIF                                           |                                      |                                      |                                                   |
|                                                                                                        |                                 | Sub-stream: WD1 / 4CIF(real-time) / CIF / QCIF / QVGA                                                       |                                      |                                      |                                                   |
| 9                                                                                                      | Frame rate                      | Main stream: 1/16 fps ~ Real time frame rate                                                                |                                      |                                      |                                                   |
|                                                                                                        |                                 | Sub-stream: 1/16 fps ~ Real time frame rate                                                                 |                                      |                                      |                                                   |
| 10                                                                                                     | Video bitrate                   | 32 Kbps to 6 Mbps                                                                                           |                                      |                                      |                                                   |
| 11                                                                                                     | Audio output                    | 1-ch, RCA (Linear, 1KΩ)                                                                                     |                                      |                                      |                                                   |
| 12                                                                                                     | Audio bitrate                   | 64 Kbps                                                                                                     |                                      |                                      |                                                   |
| 13                                                                                                     | Dual-stream                     | Support                                                                                                     |                                      |                                      |                                                   |
| 14                                                                                                     | Stream type                     | Video, Video & Audio                                                                                        |                                      |                                      |                                                   |
| 15                                                                                                     | Synchronous Playback Resolution | 4-Channel                                                                                                   | 8- Channel                           | 16 -Channel                          |                                                   |
|                                                                                                        |                                 | 1080P / 720P / WD1 / 4CIF / CIF / QCIF/ MPEG4                                                               |                                      |                                      |                                                   |
| 16                                                                                                     | Network protocols               | TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP, SMTP, SNMP, NFS, iSCSI, UPnP™, HTTPS                                   |                                      |                                      | EZVIZ Cloud P2P - If available, is to be disabled |

|    |                                  |                                                                                                                                                 |            |                                                        |  |
|----|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------|--|
| 17 | SATA                             | Min 1 SATA interface (Each SATA to support upto 4 TB) for 4 Channel<br>Min 1 SATA interface (Each SATA to support upto 4 TB) for 8 & 16 Channel |            |                                                        |  |
| 18 | Capacity                         | 4-Channel                                                                                                                                       | 8- Channel | 16 -Channel                                            |  |
|    |                                  | 2 TB HDD                                                                                                                                        | 4 TB HDD   | 4 TB HDD                                               |  |
| 19 | E SATA                           | 1 PORT                                                                                                                                          |            |                                                        |  |
| 20 | Network                          | 4-Channel                                                                                                                                       | 8- Channel | 16 -Channel                                            |  |
|    | interface                        | 1; 10M / 100M self-adaptive Ethernet interface                                                                                                  |            | 1; 10M / 100M / 1000M self-adaptive Ethernet interface |  |
| 21 | Serial interface                 | 1; standard RS-2085 serial interface, Half duplex/ Full duplex                                                                                  |            |                                                        |  |
| 22 | USB port                         | 2 × USB 2.0 Ports                                                                                                                               |            |                                                        |  |
| 23 | Alarm in / out                   | 4 INPUT / 1 OUTPUT                                                                                                                              |            | 4 INPUT / 2 OUTPUT                                     |  |
| 24 | Power supply                     | 12V DC                                                                                                                                          |            |                                                        |  |
| 25 | Consumption (without hard disks) | ≤ 15W                                                                                                                                           | ≤ 20W      | ≤ 30W                                                  |  |
| 26 | Working temperature              | -10 °C ~+55 °C (14 °F ~ 131 °F)                                                                                                                 |            |                                                        |  |
| 27 | Working humidity                 | 10% ~ 90%                                                                                                                                       |            |                                                        |  |
| 28 | Chassis                          | 1U chassis                                                                                                                                      |            | 1U/2U chassis                                          |  |
| 29 | Certifications                   | UL,CE,FCC                                                                                                                                       |            |                                                        |  |
| 30 | Recording Resolution             | 1080p/ 720p/ VGA/ WD1/ 4CIF/ CIF/ QVGA/ QCIF                                                                                                    |            |                                                        |  |
| 31 | Record Rate-Main Stream          | 1080p/ 720p/ VGA/ WD1/ 4CIF/ CIF/ QVGA/ QCIF (1/16 fps to Real-time frame rate)                                                                 |            |                                                        |  |
| 32 | Record Rate-Extra Stream         | WD1/ 4CIF/ CIF/ QCIF/ QVGA (1/16 fps to Real-time frame rate)                                                                                   |            |                                                        |  |
| 33 | Record Mode                      | Manual/ Schedule/ Motion detection                                                                                                              |            |                                                        |  |
| 34 | Privacy Masking                  | Supported                                                                                                                                       |            |                                                        |  |
| 35 | OSD                              | Camera Title, Time, Vide Loss, Recording, Motion Detection                                                                                      |            |                                                        |  |
| 36 | Remote                           | Yes, IR                                                                                                                                         |            |                                                        |  |
| 37 | <b>Accepted Make/Brand</b>       | <b>Hikvision, Dahua, Methodex</b>                                                                                                               |            |                                                        |  |

| <b>TECHNICAL SPECIFICATION FOR 4/8/16 CHANNEL<br/>NETWORK VIDEO RECORDER (NVR)</b> |                                                         |                                                                                                                                                                   |                               |
|------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| <b>Sr No</b>                                                                       | <b>Parameters</b>                                       | <b>Specifications</b>                                                                                                                                             | <b>Remarks</b>                |
| 1                                                                                  | IP video input                                          | 8 Ch/ 16 Ch                                                                                                                                                       |                               |
| 2                                                                                  | Two-way audio                                           | 1 Ch, RCA (2.0 Vp-p, 1K $\Omega$ )                                                                                                                                |                               |
| 3                                                                                  | Incoming bandwidth                                      | 2 Mbps                                                                                                                                                            |                               |
| 4                                                                                  | Outgoing bandwidth                                      | 2 Mbps                                                                                                                                                            |                               |
| 5                                                                                  | Remote connection                                       | 128                                                                                                                                                               |                               |
| 6                                                                                  | Recording resolution                                    | 6MP/5MP/3MP/2MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF/ MP4 /AVI                                                                                             |                               |
| 7                                                                                  | Frame rate                                              | Main stream: Min 30 fps/ 50 fps (P)/ 60 fps (N)<br>Sub-stream: 50 fps (P) / 60 fps (N)                                                                            |                               |
| 8                                                                                  | HDMI/VGA output                                         | 1 Ch, resolution:                                                                                                                                                 |                               |
|                                                                                    |                                                         | 1920 × 1080 /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz                                                                       |                               |
| 9                                                                                  | Audio output                                            | 1-ch, RCA (Linear, 1K $\Omega$ )                                                                                                                                  |                               |
| 10                                                                                 | Live view / Playback resolution                         | 6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF                                                                                                           |                               |
| 11                                                                                 | Capability                                              | 8-ch@720P, 6-ch@1080P                                                                                                                                             |                               |
| 12                                                                                 | SATA                                                    | 8 SATA interfaces for 4 HDDs + 1 DVD-R/W (default), or 8HDDs<br>(1 or 2 HDD support is also fine for branches with high capacity HDD for cost effective solution) |                               |
| 13                                                                                 | eSATA (Optional)                                        | 1 eSATA interface                                                                                                                                                 |                               |
| 14                                                                                 | Capacity                                                | Up to 4/6/8 TB capacity for each HDD to cover 90 days recording                                                                                                   |                               |
| 15                                                                                 | Network interface                                       | 2 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces                                                                                                      |                               |
| 16                                                                                 | Serial interface                                        | RS-232 and RS-485                                                                                                                                                 |                               |
| 17                                                                                 | USB interface                                           | 2 × USB 2.0 + 1 × USB 3.0                                                                                                                                         |                               |
| 18                                                                                 | Alarm in / out                                          | 16/ 4 (optionally can be expanded to 16/ 8)                                                                                                                       |                               |
| 19                                                                                 | Power supply Consumption (without hard disk or DVD-R/W) | 100 ~ 240 VAC ≤ 20 W                                                                                                                                              |                               |
| 20                                                                                 | Working temperature                                     | -10 °C ~ +55 °C (14°F ~ 131°F)                                                                                                                                    |                               |
| 21                                                                                 | Working humidity                                        | 10 % ~ 90 %                                                                                                                                                       |                               |
| 22                                                                                 | Chassis                                                 | 19-inch rack-mounted 2U chassis                                                                                                                                   |                               |
| 23                                                                                 | Dimensions (W × D × H)                                  | Preferred - 445 × 470 × 70 mm ( 17.5"× 18.5" × 2.8")                                                                                                              | Size may change as required   |
| 28                                                                                 | Weight(without hard disk or DVD-R/W )                   | Preferred = ≤ 8 kg (17.6 lb)                                                                                                                                      | Weight may change as required |
| 29                                                                                 | Accepted Make/Brand                                     | Hikvision, Dahua, Methodex                                                                                                                                        |                               |

| <b>VARIFOCAL HD WDR (WIDE DYNAMIC RANGE) &amp; IR (INFRARED RANGE) DOME CAMERA</b> |                              |                                                  |                |
|------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------|----------------|
| <b>Sr. No</b>                                                                      | <b>Parameters</b>            | <b>Specifications</b>                            | <b>Remarks</b> |
| 1                                                                                  | Image Sensor                 | 1.3MP 1/3" CMOS Image Sensor                     |                |
| 2                                                                                  | Effective Pixels             | 1280(H)*960(V)                                   |                |
| 3                                                                                  | Min. Illumination            | 0.01 Lux @(F1.2,AGC ON), 0 Lux with IR           |                |
| 4                                                                                  | Shutter Time                 | 1/25(1/30) s to 1/50,000 s                       |                |
| 5                                                                                  | Lens                         | 2.8 - 12 mm @ F1.4                               |                |
|                                                                                    |                              | Angle of view: 97° - 30.4°                       |                |
| 6                                                                                  | Lens Mount                   | φ14                                              |                |
| 7                                                                                  | Angle Adjustment             | Pan: 0 - 360°, Tilt: 0 - 75°, Rotation: 0 - 360° |                |
| 8                                                                                  | Day & Night                  | Auto with ICR                                    |                |
| 9                                                                                  | Synchronization              | Internal synchronization                         |                |
| 10                                                                                 | Video Frame Rate             | 720p@25fps/720p@30fps                            |                |
| 11                                                                                 | HD Video Output              | 1 Analog HD output                               |                |
| 12                                                                                 | CVBS Output                  | Can Connect to any existing or HD DVR            |                |
| 13                                                                                 | S/N Ratio                    | >62dB                                            |                |
| 14                                                                                 | Working Temperature/Humidity | -40 °C to +60 °C(-40 F - 140 F)                  |                |
|                                                                                    |                              | Humidity 90% or less (non-condensing)            |                |
| 15                                                                                 | Power Supply                 | 12V DC±15%                                       |                |
| 16                                                                                 | Power consumption            | 4.7 W maximum                                    |                |
| 17                                                                                 | Weather Proof Ratings        | IP66                                             |                |
| 18                                                                                 | IR Range                     | Minimum 10 meters                                |                |
| 19                                                                                 | Certifications               | UL / CE / FCC                                    |                |
| 20                                                                                 | <b>Accepted Make/Brand</b>   | <b>Hikvision, Dahua, Methodex</b>                |                |

**NOTE: -** The Camera facing the main entrance of the Branch or the locations where the Sun lights appear opposite to the camera must be a WDR type or equivalent camera. The purpose is to see the object or person image clearly in the monitor screen.

| <b>FIXED 1.3MP IP IR DOME CAMERA</b> |                            |                                                                                               |                |
|--------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------|----------------|
| <b>Sr. No</b>                        | <b>Parameters</b>          | <b>Specifications</b>                                                                         | <b>Remarks</b> |
| 1                                    | Video standards            | H.264 / MPEG4 / MJPEG                                                                         |                |
| 2                                    | Sensor                     | 1/3 inch HD resolution CMOS/CCD                                                               |                |
| 3                                    | Scanning                   | Progressive Scan system                                                                       |                |
| 4                                    | System Compatibility       | ONVIF                                                                                         |                |
| 5                                    | Resolution                 | 720 to 1280 (H) x 960 (V)                                                                     |                |
| 6                                    | Signal Stream              | Dual Stream                                                                                   |                |
| 7                                    | Lens                       | Min 3.6 mm - Max 12 mm                                                                        |                |
| 8                                    | Minimum Illumination       | 0.01 lux@F1.2                                                                                 |                |
|                                      |                            | 0 lux with IR                                                                                 |                |
| 9                                    | IR Cut Filter              | Yes                                                                                           |                |
| 10                                   | Wide Dynamic Range         | Yes                                                                                           |                |
| 11                                   | Digital noise reduction    | 3D DNR (if Audio enabled Camera)                                                              |                |
| 12                                   | Day & night                | Auto ICR                                                                                      |                |
| 13                                   | AGC                        | Yes                                                                                           |                |
| 14                                   | BLC/HLC                    | Yes                                                                                           |                |
| 15                                   | Iris control               | DC drive                                                                                      |                |
| 16                                   | IR Range                   | Minimum 10 meters                                                                             |                |
| 17                                   | Protocols                  | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP,                                                         |                |
|                                      |                            | DNS, DDNS, RTP, RTSP, RTCP, PPPoE,                                                            |                |
|                                      |                            | NTP, UPnP, SMTP, SNMP, IGMP, 802.1X,                                                          |                |
|                                      |                            | QoS, IPv6,                                                                                    |                |
| 18                                   | Ethernet                   | 1 RJ45 10M / 100M Ethernet port                                                               |                |
| 19                                   | Input voltage              | 12 VDC $\pm$ 10% or PoE, IEEE 802.3 af                                                        |                |
| 20                                   | Operating Temp.            | -10°C to +50°C                                                                                |                |
| 21                                   | Operating Humidity         | Humidity 95% or less (non-condensing)                                                         |                |
| 22                                   | Local Storage              | Micro SD/SDXC card slot, up to 128 GB (High Speed HD Card)                                    |                |
| 23                                   | Alarm trigger              | Motion detection, tampering alarm, network disconnect, IP address conflict, storage exception |                |
| 24                                   | Security                   | Watermark, User authentication, IP address filtering, anonymous access.                       |                |
| 25                                   | Enclosure                  | IEC60068 up to IK10 Impact protection                                                         |                |
| 26                                   | Certification              | UL / FCC / CE                                                                                 |                |
| 27                                   | <b>Accepted Make/Brand</b> | <b>Hikvision, Dahua, Methodex</b>                                                             |                |

| <b>VARIFOCAI HD IR BULLET CAMERA</b> |                              |                                                  |                |
|--------------------------------------|------------------------------|--------------------------------------------------|----------------|
| <b>Sr. No</b>                        | <b>Parameters</b>            | <b>Specifications</b>                            | <b>Remarks</b> |
| 1                                    | Image Sensor                 | 1.3MP 1/3" CMOS Image Sensor                     |                |
| 2                                    | Effective Pixels             | 1080 to 1280(H)*960(V)                           |                |
| 3                                    | Min. Illumination            | 0.01 Lux @(F1.2,AGC ON), 0 Lux with IR           |                |
| 4                                    | Shutter Time                 | 1/25(1/30) s to 1/50,000 s                       |                |
| 5                                    | Lens                         | 2.8 - 12 mm @ F1.4                               |                |
| 6                                    |                              | Angle of view: 97° - 30.4°                       |                |
| 7                                    | Lens Mount                   | φ14                                              |                |
| 8                                    | Angle Adjustment             | Pan: 0 - 220°, Tilt: 0 - 75°, Rotation: 0 - 220° |                |
| 9                                    | Day & Night                  | Auto with ICR                                    |                |
| 10                                   | Synchronization              | Internal synchronization                         |                |
| 11                                   | Video Frame Rate             | 720p@25fps/720p@30fps                            |                |
| 12                                   | HD Video Output              | 1 Analog HD output                               |                |
| 13                                   | CVBS Output                  | Can Connect to any existing or HD DVR            |                |
| 14                                   | S/N Ratio                    | >62dB                                            |                |
| 15                                   | Working Temperature/Humidity | -40 °C to +60 °C(-40 F - 140 F)                  |                |
| 16                                   |                              | Humidity 90% or less (non-condensing)            |                |
| 17                                   | Power Supply                 | 12V DC±15%                                       |                |
| 18                                   | WDR                          | 120 Db                                           |                |
| 19                                   | Weather Proof Ratings        | IP66                                             |                |
| 20                                   | IR Range                     | From 10 to 40 Meters                             |                |
| 21                                   | Certifications               | UL / CE / FCC                                    |                |
| 22                                   | <b>Accepted Make/Brand</b>   | <b>Hikvision, Dahua, Methodex</b>                |                |

| <b>FIXED HD IR BULLET CAMERA</b> |                              |                                                  |                |
|----------------------------------|------------------------------|--------------------------------------------------|----------------|
| <b>Sr. No</b>                    | <b>Parameters</b>            | <b>Specifications</b>                            | <b>Remarks</b> |
| 1                                | Image Sensor                 | 1.0MP 1/3" CMOS Image Sensor                     |                |
| 2                                | Effective Pixels             | 1080 to 1280(H)*960(V)                           |                |
| 3                                | Min. Illumination            | 0.01 Lux @(F1.2,AGC ON), 0 Lux with IR           |                |
| 4                                | Shutter Time                 | 1/25(1/30) s to 1/50,000 s                       |                |
| 5                                | Lens                         | 3.6 mm (6 mm, 12 mm optional)                    |                |
| 6                                |                              | Angle of view: 97° - 30.4°                       |                |
| 7                                | Lens Mount                   | φ14                                              |                |
| 8                                | Angle Adjustment             | Pan: 0 - 220°, Tilt: 0 - 75°, Rotation: 0 - 220° |                |
| 9                                | Day & Night                  | Auto with ICR                                    |                |
| 10                               | Synchronization              | Internal synchronization                         |                |
| 11                               | Video Frame Rate             | 720p@25fps/720p@30fps                            |                |
| 12                               | HD Video Output              | 1 Analog HD output                               |                |
| 13                               | CVBS Output                  | Can Connect to any existing or HD DVR            |                |
| 14                               | S/N Ratio                    | >62dB                                            |                |
| 15                               | Working Temperature/Humidity | -40 °C to +60 °C(-40 F - 140 F)                  |                |
|                                  |                              | Humidity 90% or less (non-condensing)            |                |
| 17                               | Power Supply                 | 12V DC±15%                                       |                |
| 18                               | Weather Proof Ratings        | IP66                                             |                |
| 19                               | IR Range                     | Upto 30m                                         |                |
| 20                               | Certifications               | UL / CE / FCC                                    |                |
| 21                               | <b>Accepted Make/Brand</b>   | <b>Hikvision, Dahua, Methodex</b>                |                |

| TECHNICAL SPECIFICATIONS FOR HIGH RESOLUTION PIN HOLE CAMERA |                     |                                          |         |
|--------------------------------------------------------------|---------------------|------------------------------------------|---------|
| Sr. No                                                       | Parameters          | Specifications                           | Remarks |
| 1                                                            | Pick-up device      | 1/3" SONY CCD                            |         |
| 2                                                            | Effective pixels    | NTSC: 768*494.PAL:752*582                |         |
| 3                                                            | Resolution          | Color-700 TVL 720 TVL                    |         |
| 4                                                            | Sync system         | Internal                                 |         |
| 5                                                            | Min. illumination   | Colour-0.01Lux B/W 0.001Lux              |         |
| 6                                                            | S/N ratio           | More than 50dB                           |         |
| 7                                                            | Electronic shutter  | Auto, 1/50 (1/60), 1/100,000 sec         |         |
| 8                                                            | Lens                | 3.7mm Pin Hole (2.8mm optional)          |         |
| 9                                                            | D-WDR               | Off/Indoor/Outdoor                       |         |
| 10                                                           | Mirror function     | On/off                                   |         |
| 11                                                           | BLC                 | On/off                                   |         |
| 12                                                           | Motion detection    | Yes                                      |         |
| 13                                                           | Gamma               | Auto/manual                              |         |
| 14                                                           | White balance       | ATW/AWB/AWC Set/Manual/Indoor/Outdoor    |         |
| 15                                                           | AGC                 | Off/Low/Middle/High                      |         |
| 16                                                           | Day & Night         | Color/B/W/Auto level adjust              |         |
| 17                                                           | Video output        | 1.00V p-p Composite Video Output, 75 Ohm |         |
| 18                                                           | Power supply        | DC12V                                    |         |
| 19                                                           | Power consumption   | 3 Watts max                              |         |
| 20                                                           | Certification       | UL / CE / FCC                            |         |
| 21                                                           | Accepted Make/Brand | Hikvision, Dahua, Methodex               |         |



| <b>TECHNICAL SPECIFICATIONS FOR 21" / 32" LED COLOUR MONITOR</b> |                              |                                                                                |                |
|------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------|----------------|
| <b>Sr. No</b>                                                    | <b>Parameters</b>            | <b>Specifications</b>                                                          | <b>Remarks</b> |
| 1                                                                | Screen                       | TFT-LED Backlight                                                              |                |
| 2                                                                | Screen Size                  | 19.5 Inches/ 21 Inches / 32 Inches                                             |                |
| 3                                                                | Resolution                   | 1920 X 1080 Full HD Display                                                    |                |
| 4                                                                | Viewing Angle                | 170 Degree Wide                                                                |                |
| 5                                                                | Video Input Mode             | HDMI, VGA, RC Signal                                                           |                |
| 6                                                                | On-Screen Display (OSD) Menu | True Colour and User Friendly operation Menu                                   |                |
| 7                                                                | Aspect Ratio                 | Supports 16:9 or 4:3 aspect ratio selectable in OSD Menu                       |                |
| 8                                                                | Audio                        | Built-In Speaker and Audio Amplifier<br>Adopt 3D Noise Reduction Technology    |                |
| 9                                                                | Mount                        | VESA stand                                                                     |                |
| 10                                                               | Certification                | ISI / CE / UL / FCC Certificate or any other standard certificate in the field |                |
| 21                                                               | <b>Accepted Make/Brand</b>   | <b>Sony, LG, Samsung, Hikvision, Dahua</b>                                     |                |

**TECHNICAL SPECIFICATIONS FOR INTEGRATED (BURGLAR CUM FIRE ) ALARM SYSTEM WITH IN-BUILT  
AUTO DAILER**

| Sr No | Parameters    | Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Remarks |
|-------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1     | Control Panel | <p>Specification :-</p> <ol style="list-style-type: none"> <li>1. one Zone with fire and smoke detectors connection</li> <li>2. one zone with Panic Switch connection</li> <li>3. one Zone with PIR Sensors sequence</li> <li>4. one zone with Shutter / Door Sensors</li> </ol> <p>above all features must be in other 4 zones if panel installed 8 zone.</p> <p>Fire Alarm zone must be connect with in built PCB or inbuilt feature</p> <p>Panel with LAN port (for CMS connectivity), CCTV camera connectivity port, in built Auto dialers, Separate Key pad (to install in BM's cabin),</p> <p>Auto Alarm / Disarm as per the time set. (it's required for Night mode or day mode operation).</p> <p>Main Input Volatage - 230 to 250 Volt AC, 50 Hz</p> <p>One Zone for 24 hour emergency zone for better security</p> <p>One Zone for Day/Night Mode for Intrusion detectors with variable Entry/Exit delay selection of 15, 30, 120, upto 255 secs</p> <p>Built-in tone generator and amplifier for External Speakers ( min 2nos)</p> <p>Tamper proof wiring for panic buttons, Night Sensor and Speakers/Sounders</p> <p>Auto Isolation of defective zones</p> <p>Testing of Wiring, Panic Buttons, Night Sensor without sounding the main speakers/sounders</p> <p>Different coloured LED's for -</p> <ol style="list-style-type: none"> <li>a. Mains indication</li> <li>b. Battery indication</li> <li>c. Faulty / Isolated Zones indication</li> <li>d. Alarm Indication</li> <li>e. Day / Night mode indication</li> </ol> <p>Highly user friendly design</p> <p>Software upgradeable for new features</p> <p>Easy interface with other systems and security accessories like Magnet Switch, PIR, Auto Dialer etc</p> <p>High tolerance against noise and voice variations</p> <p>Modular construction for easy servicing</p> <p>Activation in case of tampering</p> <p>In-built battery back-up provision</p> |         |

|   |                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|---|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|   |                                                        | <p>Automatic switch over from power mode to battery mode in case of power failure and vice-versa</p> <p>Battery Protection-Battery deep discharge &amp; short circuit through fuse Amplifiers</p> <p>Protection against False Alarm / Anti -Rodent facility.</p> <p>Certification - CE</p> <p>Back-up battery -12 Volts, 7 Ah, SMF battery ( Standard Make)</p> <p>Reporting formats - SIA3, Contact ID &amp; Fast Format</p> <p>SMS Remote Control App compatibility</p> <p>PSTN and/or GSM Modem</p> <p>In-built Memory logs -1250nos</p> <p>GPRS modem for IP Communication</p> <p>Remote Control + App compatibility</p> <p>No. of Partitions - 8nos.</p> <p>Certifications -Environmental Class II</p> |  |
| 2 | External Speaker (with LED option)                     | <p>a. 40W</p> <p>b. Power (65-70 db)</p> <p>c. 4 wired with tamper loop</p> <p>d. Low current consumption</p> <p>e. ABS Body</p> <p>f. Weather Proof Housing</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| 3 | IP compatibility<br><br>In-Built Auto Dialer           | <p><b>The Alarm system must be IP compatible for future CMS</b></p> <p><b>Built in Auto dialer (PSTN)</b>, alert test mode, emergency alarm, alarm Acknowledgement, Tamper proof.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| 4 | Surface Mounted Magnetic Contact                       | <p>a. Minimum Operating distance 15-20mm</p> <p>b. CE approved</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| 5 | Dual Technology Passive Infrared Detector (PIR Sensor) | <p>a. Microwave Frequency</p> <p>b. Detection range 10m x 10m</p> <p>c. Microprocessor Controller</p> <p>d. Tamper proof mounting</p> <p>e. Automatic temperature compensation</p> <p>f. Sealed Optics</p> <p>g. Adjustable Ring</p> <p>h. Wide coverage angle, Min 85 Degree</p> <p>i. Rodent / Pet Prrf</p> <p>j. Good Temperature tolerance</p> <p>k. Superior Radio frequency, fast transient and electrostatic discharge immunity</p> <p>l. CE certified</p>                                                                                                                                                                                                                                           |  |

|    |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|----|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 6  | Panic Button                      | 1. Microswitch rated at 5Amp @24 VDC<br>2. Touch ABS Plastic<br>3. Output-NC,NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| 7  | Magnetic Contact                  | 1. Magnetic Contact WHITE<br>2. Standard Gap : 1" (25mm)<br>3. Adhesive / Screw Mounted<br>4. 12" (30cm) leads                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 8  | Overhead Shutter Magnetic Contact | a. Standard Gap 2"<br>b. 24" armored cable<br>c. Cast Magnet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| 9  | PIR Motion Detector               | Detection Method : Dual Element Passive Infrared<br>Coverage :<br><b>1. Detection Zones :85 degree, 52 zones, 5 planes</b><br>*a. Pet Immune lens : 52 zones<br><b>2. Pulse Processing</b><br>a. Intermediate, Standard or Harsh selectable via jumper link<br>3. Temperature Compensation<br>a. Advance Digital Temperaturecompensation adjusts for above and below body temperature<br><b>4. Tamper Proof Design</b><br>a. Alarm relay cannot be compromised with a magnet<br><b>7. Detectable Walk Rate</b><br>a. 0.5 - 10 ft/sec<br><b>8. Mounting Height</b><br>a. 7ft (2.4m) recommendable for Pet Immune<br><b>9. Blue Wave Technology</b><br><b>10. Alarm Relay :</b><br>Form A. SPST 90mA @ 16 VDC with 15-Ohm protective resistor<br><b>11. Input Voltage : 8-16 VDC</b><br><b>12. Current : 4mA (Standby)</b><br><b>13. Operating Temperature : Upto 95% RH (max) non-condensing</b><br><b>14. Certification - CE</b><br><b>15. Environmental Class -II</b> |  |
| 10 | Glassbreak Detector               | a. Physical Dimensions : White high impact ABS plastic housing<br>c. Range : 8m max omnidirectional, no minimum range<br>d. Alarm Relay : Form C, 125mA, 25 VDC<br>e. Tamper Switch : Combination of cover & wall tamper<br>f. Power Requirements: 6-18 VDC, 12mA<br>g. AC Ripple : 4 V peak-to-peak at nominal 12VDC<br>h. Operating Temperature : -10 to 50 Degree<br>i. Approvals - CE<br>j.Angle of Coverage -360 degree                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |

|    |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|----|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |                     | k. Glass Type / Thickness : Plate, Tempered, Laminated, Wired, Coated, Sealed, Insulated, max 10mm<br>l. Dual confirmation detection - First Impact<br>m. Detects the frequency of glass flexing<br>n. Detects the frequency of glass breaking                                                                                                                                                                                                                                                                    |  |
| 11 | Shock Sensor        | Loop Voltage - 3VDC (min) to 20VDC (max)<br>Loop Current - 100mA max<br>Power Requirement - Less than 1 Ma<br>Transient Suppression - 600 watts<br>Alarm Output type - Normal-Closed solid-state output<br>Alarm Output resistance - 20 Ohm max (closed /alarm condition)<br>1 Ohm minimum (open/alarm condition)<br>Alarm Output timing - Open for 1 sec min during an alarm condition<br>Operating temperature - 18 - 55 degree<br>Dimensions -<br>Wiring Leads - 22 AWG, 2 conductor zip cord<br>Colour- White |  |
| 12 | Keypad              | Alpha Numeric Keypad with 2 sensor input<br>Wiring : 4 wire<br>Current - Standby 60mA, Activated -190mA<br>Integrated Prox reader<br>Internal use Prox reader                                                                                                                                                                                                                                                                                                                                                     |  |
| 13 | External Sounder    | Electronic Siren, 6-12VDC, 15 watt, 109 db<br>Current - 100mA<br>Output - 110db<br>Size - 60mm x 60mmx70mm                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| 14 | Hooter (Long Range) | Electronic Siren, 6-12VDC, 15 watt, 117 db<br>Voltage - 12V DC<br>Current Draw : 400mA, 6 VDC / 1.2 AMPS, 12 VDC<br>Sound Output : 118 db, 12 VDC                                                                                                                                                                                                                                                                                                                                                                 |  |
| 15 | Battery             | 7 Ah battery for back-up (SI Scope)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|    | Smoke Detectors     | Wide-angle, dual-color LED indication<br>Built-in remote maintenance signaling<br>Voltage - 12/24V non polarised<br>Built-in test switch<br>Operating Temperature Range = 2W-B and 4W-B: 32°F to 120°F (0°C to 49°C); 2WT-B and 4WT-B: 32°F to 100°F (0°C to 37.8°C)<br>Operating Humidity Range = 0 to 95% RH non-condensing<br>Thermal Sensor = 135°F (57.2°C) fixed<br>Freeze Trouble = 2WT-B and 4WT-B only: 41°F (5°C)<br>Input Terminals = 14 to 22 AWG                                                     |  |
| 16 | Heat Detectors      | Wide-angle, dual-color LED indication                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |

|    |                                   |                                                                                                                                                                                                                                                                                                                                                                  |  |
|----|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |                                   | <p>Built-in remote maintenance signaling</p> <p>Operating Voltage / Contact Rating = 6–125VAC / 3A</p> <p>6–28VDC / 1A</p> <p>125VDC / 0.3A</p> <p>250VDC / 0.1A</p> <p>Maximum Installation Temperature = 5601P, 5603, 5621, and 5623: 100°F (38°C) 5602, 5604, 5622, and 5624: 150°F (65.6°C)</p> <p>Rate-of-Rise Threshold = 15°F (8.3°C) rise per minute</p> |  |
| 17 | Wire / Cable / Conduit : SI Scope | <p>a. fire Alarm cable must be FRLS - Min One Sq MM (if Armoured to protect cutting or rat bites)</p> <p>b. PIR sensor cable must be 4 core armoured cable to prevent false alarms.</p> <p>In others cases, any other cable is ok</p>                                                                                                                            |  |
| 18 | <b>Accepted Make/Brand</b>        | <b>DSC, Securico, Qualitronics, Digitalis, Seple, Eagle, Gadsec, Taxecom, ANG, Godrej, Rider, NSE</b>                                                                                                                                                                                                                                                            |  |

| TECHNICAL SPECIFICATIONS FOR CONVENTIONAL FIRE ALARM SYSTEM |                          |                                                                                                                              |         |
|-------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------|---------|
| Sr                                                          | Parameters               | Specifications                                                                                                               | Remarks |
| 1                                                           | Fire Alarm Control Panel | Micro controller based 2, 4,8 to 16 zones                                                                                    |         |
|                                                             |                          | Fully confirms IS 2189                                                                                                       |         |
|                                                             |                          | Operates on 230 V AC, 50 Hz AC supply                                                                                        |         |
|                                                             |                          | Battery backup with built in charger to support system for 48 hrs. during normal operation and 30 minutes in alarm condition |         |
|                                                             |                          | Fire / fault status in unambiguous colored LED indications.                                                                  |         |
|                                                             |                          | 16 x 2 line dot matrix LCD display                                                                                           |         |
|                                                             |                          | Zone wise fire, open, short LED indications.                                                                                 |         |
|                                                             |                          | External s/w to test each zone fire, open, short status manually.                                                            |         |
|                                                             |                          | External s/w for reset, Silence, Lamp test.                                                                                  |         |
|                                                             |                          | Zone isolation facility with loop voltage cutoff.                                                                            |         |
|                                                             |                          | Relay O/P for actuators.                                                                                                     |         |
|                                                             |                          | Mains on, System On, Charger on, visual indications.                                                                         |         |
|                                                             |                          | Battery Low& Common fire indications                                                                                         |         |
|                                                             |                          | Enough inside space for battery , 2 nos. , 12 V, 7 AH batteries.                                                             |         |
|                                                             |                          | Attachable with all types of fire detectors                                                                                  |         |
| 2                                                           | Optical Smoke Detector   | Flashing LED light for status monitoring                                                                                     |         |
|                                                             |                          | Operating voltage - 8 to 35 V DC                                                                                             |         |
|                                                             |                          | Test switch                                                                                                                  |         |
|                                                             |                          | Compatible to all known range of Conventional Fire Alarm Panel                                                               |         |
|                                                             |                          | Certifications Required: UL/LPCB/EN                                                                                          |         |
| 3                                                           | Heat Detector            | Flashing LED                                                                                                                 |         |
|                                                             |                          | Rate of rise cum fixed temperature                                                                                           |         |
|                                                             |                          | UL/LPCB/EN approved                                                                                                          |         |
| 4                                                           | Manual Call Point        | Anti- tamper facility                                                                                                        |         |
|                                                             |                          | Unique 'plug & play' installation concept                                                                                    |         |
|                                                             |                          | Backward compatibility                                                                                                       |         |
|                                                             |                          | Power I/P: 24 V DC                                                                                                           |         |
|                                                             |                          | Current Consumption: NA / 30MA(Normal /Fire)                                                                                 |         |
|                                                             |                          | Housing: ABS                                                                                                                 |         |
|                                                             |                          | Weight: 150 gm.                                                                                                              |         |
|                                                             |                          | Color: Red                                                                                                                   |         |
| 5                                                           | Response Indicator       | Unique 'plug & play' installation concept                                                                                    |         |
|                                                             |                          | Dual LED Type                                                                                                                |         |
|                                                             |                          | Input Supply: 24 V DV                                                                                                        |         |

|   |                                              |                                                                                                                                                                                       |  |
|---|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|   |                                              | Current Consumption: 5 MA                                                                                                                                                             |  |
|   |                                              | Housing: ABS / Metal Body                                                                                                                                                             |  |
|   |                                              | Weight: 50 gm.                                                                                                                                                                        |  |
|   |                                              | Colour: Red/White.                                                                                                                                                                    |  |
| 6 | Armoured Cable                               | 1 or 1.5 Sq.mm. 2-Core Cable                                                                                                                                                          |  |
|   |                                              | FRLS type                                                                                                                                                                             |  |
|   |                                              | Certifications Required: ISI                                                                                                                                                          |  |
|   | Cable Make                                   | Polycab/Finolex/ RR Kabel                                                                                                                                                             |  |
| 7 | Hooter                                       | Power I/P - 24 V DC                                                                                                                                                                   |  |
|   |                                              | External – 130Db & Internal-109 Db                                                                                                                                                    |  |
|   |                                              | Current Consumption - 300 MA                                                                                                                                                          |  |
|   |                                              | Housing - PVC/ABS                                                                                                                                                                     |  |
|   |                                              | Weight - 600gm.                                                                                                                                                                       |  |
|   |                                              | Colour - Red/White                                                                                                                                                                    |  |
| 8 | IP compatibility<br><br>In-Built Auto Dialer | <p><b>The Alarm system must be IP compatible for future CMS</b></p> <p><b>Built in Auto dialer (PSTN)</b>, alert test mode, emergency alarm, alarm Acknowledgement, Tamper proof.</p> |  |
| 9 | <b>Approved Make/Brand</b>                   | <b>Ravel, Agni, Qualitronics, Digitals, SEPL, Honeywell, Securico, Eagle, ANG, System Sensor, Apollo, Godrej, NSE</b>                                                                 |  |



| TECHNICAL SPECIFICATIONS FOR SECURITY (BURGLAR) ALARM SYSTEM WITH IN-BUILT AUTO DAILER |                                              |                                                                                                                                                                                                                                                                                                                                       |         |
|----------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Sr                                                                                     | Parameters                                   | Specifications                                                                                                                                                                                                                                                                                                                        | Remarks |
| 1                                                                                      | Security Alarm Control Panel                 | Microcontroller Based 4/8 Zone System                                                                                                                                                                                                                                                                                                 |         |
|                                                                                        |                                              | Zones programmable as delay or immediate.<br>Status on LCD.<br>Silent arming to silence exit delay audio indication<br>Night mode arming to convert delay to immediate zones. Independent entry & exit delay times programmable from 2-255 seconds.<br>Intrusion log (500 Nos)<br>Non-volatile memory to restore multiple programming |         |
|                                                                                        |                                              | Supports alarm reporting via internet with additional hardware-CMS Support                                                                                                                                                                                                                                                            |         |
|                                                                                        |                                              | All zones are tamper-proof.<br>Automatic Change Day/ Night Mode (only in Automatic Mode)Arm/ Disarm                                                                                                                                                                                                                                   |         |
|                                                                                        |                                              | All inputs & outputs should be tamper proof.<br>Should provide Holiday list.<br>In-built tamper switch ERTL TESTED                                                                                                                                                                                                                    |         |
|                                                                                        |                                              | Working input AC voltage 90V-270V AC, 12 V DC, charging voltage 13.8 V DC, Back up 12V/24 V x 7 AH, Sound level 120Db @ 1 meter, LCD display, Zone configurable, prog with delay, holiday mode, 4x4 matrix key pad                                                                                                                    |         |
| 2                                                                                      | IP compatibility                             | <b>The Alarm system must be IP compatible for future CMS</b>                                                                                                                                                                                                                                                                          |         |
|                                                                                        | In-Built Auto Dialer                         | <b>Built in Auto dialer (PSTN)</b> , alert test mode, emergency alarm, alarm Acknowledgement, Tamper proof.                                                                                                                                                                                                                           |         |
| 3                                                                                      | Auto Dialer Should Have Following Features : | Minimum 1 voice message                                                                                                                                                                                                                                                                                                               |         |
|                                                                                        |                                              | 10(20 digits) telephone numbers for Intrusion message                                                                                                                                                                                                                                                                                 |         |
|                                                                                        |                                              | 20 second recording time for each message                                                                                                                                                                                                                                                                                             |         |
|                                                                                        |                                              | Dialing to all numbers can be aborted with master code during call                                                                                                                                                                                                                                                                    |         |
|                                                                                        |                                              | Message playback facility                                                                                                                                                                                                                                                                                                             |         |
|                                                                                        |                                              | Telephone number check facility .                                                                                                                                                                                                                                                                                                     |         |
|                                                                                        |                                              | Telephone number editing facility.                                                                                                                                                                                                                                                                                                    |         |
| 3                                                                                      | Panic Button                                 | MS HOUSING WITH NC CONTACT & RELAY                                                                                                                                                                                                                                                                                                    |         |
|                                                                                        |                                              | Automatic reset (no key required)                                                                                                                                                                                                                                                                                                     |         |
|                                                                                        |                                              | Micro switch technology                                                                                                                                                                                                                                                                                                               |         |
|                                                                                        |                                              | Contact O/P: NORMALLY CLOSED /OPEN                                                                                                                                                                                                                                                                                                    |         |

|    |                            |                                                                                                                                                                                                                                                                                                                                                                              |  |
|----|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 4  | Magnetic Contact           | PLASTIC FIBRE CASING WITH MAGNET                                                                                                                                                                                                                                                                                                                                             |  |
| 5  | Magnetic Shutter Contact   | METALIC CASING WITH MAGNET OF 1"                                                                                                                                                                                                                                                                                                                                             |  |
| 6  | PIR Detector               | Pet immunity up to 55 lb (25 kg), 12V DC, compact design, PIR sensitivity adjustment, Quad element, power input 9.6-16V, weight 58Grms, NO/NC relay                                                                                                                                                                                                                          |  |
| 7  | Glass break Detector       | Dimensions 3.5" (L) x 2.5" (W) x 0.8" (D) (89 mm x 64 mm x 20 mm) Input Voltage . . 9 to 16 VDC Current Draw 12 mA to 12 VDC Current in Alarm 35 mA @ 12 VDC Alarm Relay: Contact Rating 1 Amp @ 24 VDC Tamper Switch: Contact Rating..0.1 Amp @ 24 VDC Microphone Type Omni directional Electrets Installer Test Mode Jumper J1 Alarm Memory Mode Jumper J2 Detection Level |  |
| 8  | Hooters                    | 109 dB                                                                                                                                                                                                                                                                                                                                                                       |  |
| 9  | Hooter (Long Range)        | Microprocessor Based System with in built battery backup The hooter should start blowing (Min 5 mins) as soon as the wires are tampered from the control panel Adjustable Sound Settings High power 130 db 4 wired Low current consumption 12V DC Supply Available in multiple tones                                                                                         |  |
| 10 | Battery                    | 12V/24V 7AH maintenance free rechargeable batteries                                                                                                                                                                                                                                                                                                                          |  |
| 11 | Wire                       | 2 Core PVC concealed, copper cable armored                                                                                                                                                                                                                                                                                                                                   |  |
| 12 | Cable                      | 2 core 1.5 sqmm armored cable                                                                                                                                                                                                                                                                                                                                                |  |
| 13 | Conduit                    | 1" PVC casing/conduit                                                                                                                                                                                                                                                                                                                                                        |  |
| 14 | CERTIFICATE                | CE / UL / ERTL                                                                                                                                                                                                                                                                                                                                                               |  |
| 15 | <b>Approved Make/Brand</b> | <b>DSC, Securico, Qualitronics, Digitals, SEPLE, Hikvision, Methodex, Godrej, Rider, Eagle, Taxecom, ANG, Godrej, NSE</b>                                                                                                                                                                                                                                                    |  |

| <b>FEATURES FOR BIOMETRIC SYSTEM</b> |                             |                                                                                       |                |
|--------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|----------------|
| <b>Sr</b>                            | <b>Parameters</b>           | <b>Features</b>                                                                       | <b>Remarks</b> |
| 1                                    | Storage Capacity            | Minimum Storage of 3000 Fingerprint template                                          |                |
| 2                                    | Transaction capacity        | Minimum Transaction capacity of 1,00,000 (Event buffer)                               |                |
| 3                                    | Inbuilt Keypad/ LCD display | Keypad & LCD display should be in built                                               |                |
| 4                                    | Protection                  | Should have protection from scratch and Electrostatic Discharge                       |                |
| 5                                    | Configuration time          | Enrolment or registration less than 6 seconds for Finger and Card time                |                |
| 6                                    | Log Provision               | Provision for Log                                                                     |                |
| 7                                    | Finger print read time      | Finger print read time should be less than 5 seconds                                  |                |
| 8                                    | Data downloadable port      | Data downloadable through ethernet port                                               |                |
| 9                                    | Power support               | Power supply 12 v DC                                                                  |                |
| 10                                   | Battery back up             | Battery back-up min 4 Hrs                                                             |                |
| 11                                   | Interface software          | Interface software to be provided                                                     |                |
| 12                                   | Lock                        | Electromagnetic Lock 600 lbs                                                          |                |
| 13                                   | <b>Approved Make/Brand</b>  | <b>Spectra/ ZK Teco/ eSSI/ BioMax/ Chiyu/ Realtime/Seple/ Timewatch or equivalent</b> |                |

| <b>FEATURES FOR TIME LOCK</b> |                            |                                                                       |                            |
|-------------------------------|----------------------------|-----------------------------------------------------------------------|----------------------------|
| <b>Sr. No</b>                 | <b>Parameters</b>          | <b>Features</b>                                                       | <b>Compliance (Yes/NO)</b> |
| 1                             | Panel Security             | Tamper Proof Panel                                                    |                            |
|                               |                            | Relocking switch.                                                     |                            |
|                               |                            | On-board keypad for settings                                          |                            |
|                               |                            | Display The Door status.                                              |                            |
| 2                             | Power supply/ Back Power   | DC power, battery operated with reverse polarity protection           |                            |
|                               |                            | Triggers can be set up as N/O or N/C contacts.                        |                            |
|                               |                            | LED indication for Door Lock and Unlock – LCD                         |                            |
|                               |                            | Continuous LCD indication of date, time and lock status               |                            |
| 3                             | Log record                 | Log to be stored for events                                           |                            |
|                               |                            | Tactile keypad for easy panel operation.                              |                            |
|                               |                            | In-built SMPS system.                                                 |                            |
| 4                             | Display                    | Display The Lock status.                                              |                            |
| 5                             | Configuration              | Emergency Access                                                      |                            |
|                               |                            | User Configurable Emergency Access time                               |                            |
|                               |                            | 1 general Purpose Relay For Triggering external devices – Auto dialer |                            |
|                               |                            | Continuous LCD indication for Unauthorized Entry.                     |                            |
| 6                             | Any other features         |                                                                       |                            |
| 7                             | <b>Approved Make/Brand</b> | <b>ARA-100, Digitals, Godrej, SEPLE, Eagle</b>                        |                            |