

RECOMMENDED LIST OF SECURITY / FIRE SAFETY / MISC EQUIPMENTS WITH RECENT SPECIFICATIONS PROPOSED FOR ALL BRANCHES, CC AND ADMIN UNITS

1. CCTV SYSTEMS

NOTE : RECOMMENDED WARRANTY - 2 YEARS (EXCEPT CABLES) & BATTERIES

SL	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
1.	NETWORK VIDEO RECORDER - 4 CHANNEL WITH 01 SATA HDD PORT AND ONBOARD POE	4 CHANNEL, COMPACT 1U, NVR, UL/ EN / EU/ CE CERTIFIED. H.265+/H.264 CODEC DECODING, MAX 80MBPS INCOMING BANDWIDTH, UP TO 6MP RESOLUTION PREVIEW &PLAYBACK, HDMI/VGA SIMULTANEOUS VIDEO OUTPUT, SUPPORT TCP/IP UPNP, ONVIF COMPATIBLE, 1 SATA III PORT, UP TO 6TB CAPACITY FOR EACH HDD AND FREE PROGRAMMING SOFTWARE
2.	NETWORK VIDEO RECORDER - 8 CHANNEL WITH 02 SATA HDD PORTS	8 CHANNEL, 1 U, UL/ EN / EU/ CE CERTIFIED. H.265+, H.265, SMART H.264+ CODEC DECODING, MAX 320 MBPS INCOMING BANDWIDTH, UP TO 8 MP RESOLUTION PREVIEW & PLAYBACK, HDMI/VGA SIMULTANEOUS VIDEO OUTPUT , SUPPORT TCP/IP, UPNP, ONVIF COMPATIBLE, 2 SATA III PORTS, UP TO 6TB CAPACITY FOR EACH HDD, INTERFACE 1 RJ-45 Port (10/100/1000Mbps)
3.	NETWORK VIDEO RECORDER - 16 CHANNEL WITH 04 SATA HDD PORT	16 CHANNEL 1.5 U, NVR, UL/ EN / EU/ CE CERTIFIED. H.265+, H.265, SMART H.264+ CODEC DECODING, MAX 320 MBPS INCOMING BANDWIDTH, UP TO 8 MP RESOLUTION PREVIEW & PLAYBACK, HDMI/VGA SIMULTANEOUS VIDEO OUTPUT, SUPPORT TCP/IP, UPNP, ONVIF COMPATIBLE, 4 SATA III PORTS, UP TO 6TB CAPACITY FOR EACH HDD, INTERFACE 1 RJ-45 Port (10/100/1000Mbps)
4.	NETWORK VIDEO RECORDER - 32 CHANNEL 04 SATA HDD PORT	32 CHANNEL 1.5 U 16 POE, NVR, UL/ EN / EU/ CE CERTIFIED. H.265+, H.265, SMART H.264+ CODEC DECODING, MAX 320MBPS INCOMING BANDWIDTH, UP TO 8MP RESOLUTION PREVIEW & PLAYBACK, HDMI/VGA SIMULTANEOUS VIDEO OUTPUT, SUPPORT TCP/IP, UPNP, ONVIF COMPATIBLE, 4 SATA III PORTS, UP TO 8TB CAPACITY FOR EACH HDD, INTERFACE 1 RJ-45 PORT (10/100/1000MBPS)
5.	10 TB SURVEILLANCE HARD DISC	UL,WD- AVGP SERIES/ SEAGATE
6.	8 TB SURVEILLANCE HARD DISC	UL,WD- AVGP SERIES/ SEAGATE
7.	6 TB SURVEILLANCE HARD DISC	UL,WD- AVGP SERIES/ SEAGATE



SL	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
8.	4 TB SURVEILLANCE HARD DISC	UL,WD- AVGP SERIES/ SEAGATE
9.	2 TB SURVEILLANCE HARD DISC	UL,WD- AVGP SERIES/ SEAGATE
10.	2 MP FIXED DOME IP IR CAMERA (UL/ EN/EU/CE CERTIFIED)	2MP IP NETWORK IR CAMERA , H.265+ & H.265, H.264 & MJPEG DUAL-STREAM ENCODING & DWDR,1/2.7" 2MP PROGRESSIVE CMOS, H.265+ & H.265 DUAL - STREAM ENCODING,25/30FPS@1080P(1920×1080) DWDR, DAY / NIGHT(ICR), 3DNR, AWB, AGC, BLC , MULTIPLE NETWORK MONITORING: WEB VIEWER.2.8 MM FIXED LENS (3.6MM OPTIONAL), MAX IR LEDS LENGTH 30M, IP67, POE.
11.	2 MP BULLET IP IR CAMERA (UL/ EN/EU/CE CERTIFIED)	2MP IP NETWORK IR CAMERA H.265+ & H.265, H.264&MJPEG DUAL-STREAM ENCODING & DWDR, 1/2.7" 2MP PROGRESSIVE CMOS, H.265+ & H.265 DUAL - STREAM ENCODING, 25/30FPS@1080P(1920×1080) DWDR, DAY/NIGHT(ICR), 3DNR, AWB, AGC, BLC ,MULTIPLE NETWORK MONITORING: WEB VIEWER.2.8 MM FIXES LENCE (3.6MM OPTIONAL), MAX IR LEDS LENGTH 30M, IP67, POE.
12.	2 MP PINHOLE IP IR CAMERA (UL/ EN/EU/CE CERTIFIED)	2MP IP NETWORK IR CAMERA H.265,H.264&MJPEG TRIPLE-STREAM ENCODING & WDR,1/2.7" 2MP PROGRESSIVE CMOS, 25/30FPS@1080P(1920×1080) DWDR, 3DNR, AWB, AGC, BLC ,MULTIPLE NETWORK MONITORING: WEB VIEWER.2.8 MM PINHOLE LENSE
13.	1.3 MP IP IR WIFI HD CUBE CAMERA	1.3MP IP IR CUBE CAMERA WIFI-10 MTR, DWDR, H.264 & MJPEG, MICRO SD CARD SLOT, BUILT- IN MIC & SPEAKER, MOBILE SOFTWARE: iCMOB, gCMOB, WCMOB
14.	ROUTER FOR CUBE CAMERA WITH MICRO SIM CARD SLOT	3G/4G ROUTERS, NETWORK TYPE 4G: FDD-LTE 3G: DC-HSPA+/HSPA+/HSPA/UMTS B1/B8 (2100/900 MHZ), INTERFACE 3 10/100MBPS LAN PORTS, 1 10/100MBPS LAN/WAN PORT, 1 MICRO SIM CARD SLOT, WIRELESS STANDARDS IEEE 802.11AC/N/A 5GHZ, IEEE 802.11B/G/N 2.4GHZ,FREQUENCY 2.4GHZ AND 5GHZ
15.	3 MP FISHEYE CAMERA , 3 MP WITH MCRO SD CARD	3MP IP NETWORK IR CAMERA H.265+ & H.265, H.264&MJPEG TRIPLE-STREAM ENCODING & DWDR, 1/2.7" 3MP PROGRESSIVE CMOS, 25/30 FPS@1080P(1920×1080) WDR, 3DNR, AWB, AGC, BLC ,MULTIPLE NETWORK MONITORING: WEB VIEWER.1.4 MM FIXES LENSE, BUILT-IN MIC, MICRO SD MEMORY, IP67, POE.
16.	NETWORK ATTACHED STORAGE(NAS)-1 BAY	NAS WITH 1 BAY, WITH 01 ESATA (IF AVAILABLE) PORT, MIN 01 ETHERNET PORT, 02 USB(3.0) PORTS. Max Cap: 6TB (1x 6TB HDD) (Capacity may vary by RAID types), WITH PROVISION TO CONNECT MIN 4 IP CAMERAS BRANDS: SYNOLOGY/NETGEAR/EQUIVALENT



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17.	NETWORK ATTACHED STORAGE(NAS)-2 BAY	NAS WITH 2 BAY, WITH MIN 02 ETHERNET PORT, 02 USB(3.0) PORT RAID 0, 1 AND JBOD SUPPORTED, MAX CAPACITY – 12 TB (CAPACITY MAY VARY BY RAID TYPES). WITH PROVISION TO CONNECT MIN 4 IP CAMERAS. BRANDS: SYNOLOGY/NETGEAR/EQUIVALENT
18.	4 PORT POE NETWORK SWITCH	LAYER TWO COMMERCIAL SWITCH· SUPPORTS POE POWER MANAGEMENT· SUPPORTS WALL-MOUNT INSTALLATION· SUPPORTS ANTI-THEFT LOCK HOLE· MAC AUTO LEARNING AND AGING, MAC ADDRESS CAPACITY IS 1K· SUPPORTS IEEE802.3, IEEE802.3U AND IEEE802.3X STANDARDS· RJ45 PORT SUPPORTS 10/100MBPS SELF-ADAPTATION· SUPPORTS 250 METERS LONG DISTANCE POE TRANSMISSION· CONFORMS TO IEEE802.3AF AND IEEE802.3AT POWER SUPPLY STANDARD. PORT 1 SUPPORTS HI-POE 60W POWER SUPPLY
19.	8 PORT POE NETWORK SWITCH TO BE INSTALLED WITH 8 CHL NVR	ETHERNET PORT1*10/100 BASE-T*8*10/100 BASE-T (POE POWER SUPPLY), POE POWER CONSUMPTIONPORT1≤60W, PORT2-8≤30W, TOTAL≤96W, LAYER TWO COMMERCIAL SWITCH· SUPPORTS IEEE802.3, IEEE802.3U AND IEEE802.3X STANDARDS· MAC AUTO LEARNING, AGING, MAC ADDRESS CAPACITY IS 2K· SUPPORTS MDI/MDIX SELF-ADAPTATION· SUPPORT POE, POE+, HI-POE· ADOPTS METAL ENCLOSURE
20.	16 PORT POE NETWORK SWITCH WITH 16/32 CHL NVR	16*10/100MBPS PORTS, 1*GIGABIT COMBO PORT, SUPPORT PORT AUTO FLIPPING (AUTO MDI / MDIX)· PORT 1-2 SUPPORT THE MAXIMUM POWER OF 60W, POE OUTPUT TOTAL POWER UP TO 135W· COMPLIANT IEEE 802.3, IEEE 802.3U, IEEE802.3AB, IEEE802.3X STANDARDS· SUPPORTS IEEE802.3AF, IEEE802.3AT, HI-POE STANDARDS· SUPPORTS NORMAL WORKING MODE, PORT ISOLATION (VLAN) MODE, MONITORING MODE, NETWORK EXTEND MODE. · SUPPORTS STORE-AND-FORWARD· SUPPORTS IEEE802.3X FLOW CONTROL FOR FULL-DUPLEX MODE AND BACKPRESSURE FOR HALF-DUPLEX MODE· 4K ENTRY MAC ADDRESS TABLE WITH AUTO-LEARNING AND AUTO-AGING· LED INDICATORS FOR MONITORING POWER, LINK AND ACTIVITY
21.	24 PORT POE NETWORK SWITCH WITH 32 CHL NVR	ETHERNET PORTS TWO (2) 1000 BASE-X PORTS (COMBO PORTS)TWO (2) 10/100/1000 BASE-T PORTS 24 10/100 BASE-T PORTS (POE POWER SUPPLY, POE FEATURES· HI-POE: PORTS 1 AND 2CONSUMPTION: UP TO 60 W PER PORT· IEEE802.3AF, IEEE802.3AT: PORTS 3 TO 24CONSUMPTION: UP TO 30 W PER PORT· ENHANCED POE (EPOE): PORTS 1 TO 8· TOTAL POE BUDGET: ≤ 360 W, LAYER 2 MANAGED NETWORK EPOE SWITCH ·SUPPORTS LONG DISTANCE EPOE TRANSMISSION, UP TO 800 M (2524 FT) ·SUPPORTS IEEE, E100, AND E10 TRANSMISSION MODES (PORTS 1 TO 8)·SUPPORTS TWISTED-PAIR AND COAXIAL CABLE TRANSMISSION (PORTS 1 TO 8)·SUPPORTS POE MANAGEMENT, GREEN POE, AND LEGACY SUPPORT
22.	MONITOR- LED 18.5"	18.5" SURVEILLANCE GRADE MONITOR WITH HDMI & VGA INPUT



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23.	CAT 6 CABLE	CAT 6, CORE DIAMETER 0.585MM, 305M CCA, TRANSMISSION DISTANCE UPTO 85M, PER METRE
24.	ARMOURED CAT 6 CABLE	ARMOURED CAT 6, CORE DIAMETER 0.585MM, 305M CCA, TRANSMISSION DISTANCE UPTO 85M), PER METRE
25.	RACK 4 U WITH LOCK AND FAN , FOR 4 & 8 CHANNEL NVR	FRONT DOOR WITH TOUGHENED GLASS QUALITY, ADJUSTABLE MOUNTING RAILS - FRONT AND BACK, 1 FAN MOUNTING PROVISION, TOP AND BOTTOM CABLE ENTRY PROVIDES, OPTIMAL FLEXIBILITY FOR CABLE MANAGEMENT, EASY WALL MOUNT PROVISION, EASY INSTALLATION - STANDING/WALL MOUNTING OPTION, FRAME STRUCTURE WITH MAX LOADING CAPACITY UP TO 60 KG
26.	RACK 6 U WITH LOCK AND FAN, FOR 16 & 32 CHANNEL NVR	FRONT DOOR WITH TOUGHENED GLASS QUALITY, ADJUSTABLE MOUNTING RAILS - FRONT AND BACK, 1 FAN MOUNTING PROVISION, TOP AND BOTTOM CABLE ENTRY PROVIDES, OPTIMAL FLEXIBILITY FOR CABLE MANAGEMENT, EASY WALL MOUNT PROVISION, EASY INSTALLATION - STANDING/WALL MOUNTING OPTION, FRAME STRUCTURE WITH MAX LOADING CAPACITY UP TO 60 KG
27.	OFFSITE ATM CCTV DVR WITH BUILT-IN 7 INCH SCREEN	EL/UN CERTIFIED . TRIBRID: SUPPORT HDCVI/ANALOG/IP VIDEO INPUT, HIGH PROFILE H.264 DUAL-STREAM VIDEO COMPRESSION, HDMI/VGA/TV SIMULTANEOUS VIDEO OUTPUT, ONVIF VERSION 2.3 CONFORMANCE, SUPPORT 2SATA HDDS UP TO 20TB, MULTIPLE NETWORK MONITORING: WEB VIEWER, CMS(DSS/SMART PSS)&SMART PHONE(DMSS), BUILT-IN 7 INCH SCREEN
28.	HD DVR/XVR(PENTA BRID) -4 CHANNEL WITH 01 SATA HDD PORT, ONVIF	4 CHANNEL, HD DVR/ XVR,UL/ EN / EU/ CE CERTIFIED, SUPPORTING PENTA BRID CAMERA TECHNOLOGIES(CVBS/HDTV/ HDCVI/IP/ANALOG), WITH 01 SATA HDD SUPPORT, ONVIF.
29.	HD DVR/XVR(PENTA BRID) -08 CHANNEL WITH 02 SATA HDD PORTS, ONVIF	08 CHANNEL, HD DVR/ XVR, UL/ EN / EU/ CE CERTIFIED, SUPPORTING PENTA BRID CAMERA TECHNOLOGIES(CVBS/HDTV/ HDCVI/IP/ANALOG), WITH 02 SATA HDD SUPPORT, ONVIF.
30.	HD DVR/XVR(PENTA BRID) -16 CHANNEL WITH 02 SATA HDD PORTS, ONVIF	16 CHANNEL, HD DVR/XVR, UL/ EN / EU/ CE CERTIFIED, SUPPORTING PENTA BRID CAMERA TECHNOLOGIES(CVBS/HDTV/ HDCVI/IP/ANALOG), WITH 02 SATA HDD SUPPORT, ONVIF.
31.	2 MP HD FIXED DOME IR COLOUR CAMERA, WITH WDR	MINIMUM 2 MP, WITH GLASS LENSES, WITH WDR AND ALL IN ONE TECHNOLOGY (SUPPORTING HDTV/HDCVI/AHD/CVBC), (UL/ EN/EU/CE CERTIFIED)
32.	2 MP HD INFRARED BULLET CAMERAS WITH WDR	MINIMUM 2 MP, WITH GLASS LENSES, WITH WDR AND ALL IN ONE TECHNOLOGY(SUPPORTING HDTV/HDCVI/AHD/CVBC), (UL/ EN/EU/CE CERTIFIED)



SL	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
33.	PIN HOLE CAMERA WITH WDR (UL/ EN/EU/CE CERTIFIED)	MINIMUM 700 TVL AND ABOVE WITH WDR. FIXED WITHIN A CAMOUFLAGING DEVICES SUCH AS PIR SENSOR OR SMOKE DETECTORS OR SIMILAR.
34.	PINHOLE CAMERA HOUSING	18 SWG METAL BOX (GREY) IN THE SHAPE OF SPEAKER WITH HOLES AND WITH PROVISION TO HOST PINHOLE CAMERA (HD/IP) VIEW FROM ONE OF THE HOLES
35.	RG 6 CO-AXIAL UN ARMoured VIDEO CABLE	RG 6 CO-AXIAL UN ARMoured VIDEO CABLE, PER METER
36.	POWER CABLE OF 2 CORE COPPER CONDUCTOR 2 X 1.0 SQ MM	POWER CABLE OF 2 CORE COPPER CONDUCTOR 2 X 1.0 SQ MM, PER METER
37.	12 V 5 AMP, SMPS POWER SUPPLY FOR CAMERAS	12V 5 AMP
38.	12V ,10 AMP SMPS POWER SUPPLY FOR CAMERAS	12V 10 AMP
39.	12 V 20 AMP, SMPS POWER SUPPLY FOR CAMERAS	12V 20 AMP
40.	PVC ROUND CONDUIT WHITE COLOUR	PVC ROUND CONDUIT WHITE COLOUR, PER METRE
41.	PVC FLAT CONDUIT WHITE COLOUR	PVC FLAT CONDUIT WHITE COLOUR, PER METRE
42.	WIRELESS MOUSE	WIRELESS MOUSE
43.	RJ45 TO HDMI EXTENDER(ONLY WHERE THE DISTANCE BETWEEN NVR/XVR AND MONITOR IS MORE THAN 60 MTR)	EXTENDS HDMI SIGNAL OVER ONE CAT 5E / 6 CABLE, MAX DATA RATE - 3.4 GBPS, HDMI 1.3 AND HDCP COMPLIANCE, TRANSMISSION RANGE UP TO 100 METERS AT 1080P RESOLUTION, RESOLUTION : UP TO 1080P / 60 HZ / 48 BITS, DISTANCE : 100 MTR (MAX), HDMI CONNECTOR : TYPE A POWER SUPPLY : REGULATED 5V / 2AMP, POWER CONSUMPTION : 1.2 AMP (MAX), TEMPERATURE : 0 TO 55 DEGREE C.
44.	HDMI CABLE 5MTR , 10 MTR, 20 MTR	HDMI VERSION 1.4 (HIGH DEFINITION MULTIMEDIA INTERFACE) GOLD PLATED CABLE PROVIDES AN UNCOMPRESSED DIGITAL LINK BETWEEN CONSUMER ELECTRONICS EQUIPMENT.



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45.	VGA CABLE 5MTR, 10MTR, 20 MTR	VGA HDDB 15 MALE TO MX HDDB 15 MALE PLUG CORD WITH FERRITE IS A LEAD USED FOR TRANSMITTING VIDEO SIGNALS. MX VGA CORD MOST COMMONLY USED TO LINK COMPUTERS WITH MONITORS. HOWEVER IT IS NOW USED ON SOME HIGH DEFINITION TELEVISIONS. MX VGA CABLE ARE ALWAYS USED SOLELY TO CARRY ANALOG COMPONENT RGBHV (RED - GREEN - BLUE - HORIZONTAL SYNC - VERTICAL SYNC) VIDEO SIGNALS ALONG WITH DATA.
46.	POE INJECTOR(WHERE LENGTH OF 01 CAMERA CABLE IS MORE THAN 100 MTR)	COMPLIES WITH IEEE802.3AF STANDARD, DELIVERS POWER AND DATA OVER THE SINGLE CABLE UP TO 100 METERS, NO POWER CABLING FOR ETHERNET NETWORK DEVICE, ADVANCED AUTO-SENSING ALGORITHM ENABLES PROVIDING POWER WITH 802.3AF ,PD SUPPORTS POWER CLASSIFICATION, AUTO-DETERMINE THE NECESSARY POWER REQUIREMENTS HIGH SAFETY WITH SHORT CIRCUIT PROTECTION PLUG & PLAY INSTALLATION, REQUIRES NO CONFIGURATION, EXTERNAL 48VDC POWER SUPPLY
47.	HDMI SPLITTER	FOR CONNECTING TWO MONITORS FROM NVR/XVR
48.	VGA SPLITTER	FOR CONNECTING TWO MONITORS FROM NVR/XVR
49.	HDMI SWITCHER 1X2(1 OUTPUTX02 INPUTS)	FOR CONNECTING TWO NVRS/XVRS TO SINGLE MONITOR
50.	VGA SWITCHER 1X2(1 OUTPUTX02 INPUTS)	FOR CONNECTING TWO NVRS/XVRS TO SINGLE MONITOR
51.	64 GB MICRO SD CARD	64 GB
52.	128 GB MICRO SD CARD	128 GB
53.	SURGE PROTECTOR WITH 6 SOCKETS (IN LIGHTNING EFFECTED/ HEAVY POWER FLUCTUATIONS AREAS)	6 SOCKETS
54.	WIRED MOUSE	WIRED MOUSE



2. ALARM SYSTEMS

NOTE : RECOMMENDED WARRANTY - 2 YEARS (EXCEPT CABLES) & BATTERIES

SN	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
1.	SMART BRANCH SECURITY AND FIRE ALARM CONTROL PANEL WITH KEY PAD(SEPARATE NOT ON BOARD)- PACKAGE	SUPPORTING BOTH SECURITY AND FIRE ALARM DETECTORS - UL/ EN / ETDC/ CE CERTIFIED 1.CONTROL PANEL WITH SEPARATE(NON ONBOARD) KEY PAD. 2. PSTN (AND/OR) GSM INBUILT SPEECH DIALER, CMS ENABLED (COMPATIBLE TO ANY THIRD PARTY CMS THROUGH PSTN, GSM(GPRS) & IP, MINIMUM ANY TWO) AS PER BANK REQUIREMENT. 3. SIMULTANEOUSLY AUTO DIALS PRESET NUMBERS AS WELL AS SEND ALERTS TO CMS. 4. INBUILT BATTERY BACK UP. 5. SHOULD SUPPORT AND COMMUNICATE ALERTS TO ANY THIRD PARTY CMS/HEALTH MONITORING SOFTWARE, READILY, AND THE PROTOCOL FOR COMMUNICATION SHOULD NOT BE BOUND OR LIMITED TO ANY PROPRIETARY SOFTWARE OR PROTOCOL OF THEIR OWN. SHOULD COMMUNICATE VIA SIA DC 09/CONTACT ID/CONTACT IP OR ANY INTERNATIONAL OPEN SOURCE INTRUSION PROTOCOLS. 6. SHOULD SUPPORT ZONE DOUBLING AND/OR ZONE EXPANDERS . 7. MINIMUM FEATURES: AUTO ACTIVATION ON GROUPS/PARTITION ON PRESET TIME, ARM/DISARM THROUGH SMS/IVR USING SECURE PASSKEYS, BYPASS FAULTY COMPONENTS, MINIMUM 10 PASSWORD ACCESS, PROVISION TO STORE LOGS AND EXPORT TO EXCEL, HEALTH BEAT FOR HEALTH CHECKUP MONITORING SOFTWARE , FREE PROGRAMMING SOFTWARE, FREE MOBILE MONITORING APP.
2.	KEY PAD COMPATIBLE WITH SMART PANEL (OF THE SAME MAKE AS IN SL NO: 01 above)	FOR REPLACEMENTS



SN	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
3.	SMART ATM SECURITY AND FIRE ALARM CONTROL PANEL WITH KEY PAD(SEPARATE NOT ON BOARD) PACKAGE	SUPPORTING BOTH SECURITY AND FIRE ALARM DETECTORS - UL/ EN / ETDC/ CE CERTIFIED 1. CONTROL PANEL WITH SEPARATE(NON ONBOARD) KEY PAD. 2. IP (AND/OR) GSM/GPRS INBUILT WITH CMS ENABLED (COMPATIBLE TO ANY THIRD PARTY CMS THROUGH GSM(GPRS) & IP, MINIMUM ANY ONE AS PER BANK REQUIREMENT) 3. SIMULTANEOUSLY AUTO DIALS PRESET NUMBERS AS WELL AS SEND ALERTS TO CMS. 4. INBUILT BATTERY BACK UP. 5. SHOULD SUPPORT AND COMMUNICATE ALERTS TO ANY THIRD PARTY CMS/HEALTH MONITORING SOFTWARE,READILY, AND THE PROTOCOL FOR COMMUNICATION SHOULD NOT BE BOUND OR LIMITED TO ANY PROPRIETARY SOFTWARE OR PROTOCOL OF THEIR OWN. SHOULD COMMUNICATE VIA SIA DC 09/CONTACT ID/CONTACT IP OR ANY INTERNATIONAL OPEN SOURCE INTRUSION PROTOCOLS. 6. SHOULD SUPPORT ZONE DOUBLING AND/OR ZONE EXPANDERS . 7. MINIMUM FEATURES: AUTO ACTIVATION ON GROUPS/PARTITION ON PRESET TIME, ARM/DISARM THROUGH SMS/IVR USING SECURE PASSKEYS, BYPASS FAULTY COMPONENTS, MINIMUM 10 PASSWORD ACCESS, PROVISION TO STORE LOGS AND EXPORT TO EXCEL, HEALTH BEAT FOR HEALTH CHECKUP MONITORING SOFTWARE , FREE PROGRAMMING SOFTWARE, FREE MOBILE MONITORING APP.
4.	KEY PAD COMPATIBLE WITH SMART PANEL (OF THE SAME MAKE AS IN SL NO: 03 above)	FOR REPLACEMENTS
5.	ZONE EXPANDING MODULE	8 ZONE EXPANDER COMPATIBLE WITH BRAND OF SMART PANEL AS IN SL NO: 1 (AND/OR) 3 TO GO WITH SMART PANEL
6.	ADD ON PSTN DIALER CUM COMMUNICATOR MODULE	COMPATIBLE WITH THE BRAND OF SMART PANEL AS IN SL NO: 1 (AND/OR) 3 TO GO WITH SMART PANEL
7.	ADD ON IP DIALER CUM COMMUNICATOR MODULE	COMPATIBLE WITH THE BRAND OF SMART PANEL AS IN SL NO: 1 (AND/OR) 3 TO GO WITH SMART PANEL
8.	ADD ON GSM(GPRS) DIALER CUM COMMUNICATOR MODULE	COMPATIBLE WITH THE BRAND OF SMART PANEL AS IN SL NO: 1 (AND/OR) 3 TO GO WITH SMART PANEL



SN	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
9.	CONVENTIONAL PSTN SPEECH AUTO DIALER COMPATIBLE TO CURRENTLY INSTALLED CONVENTIONAL PANELS	HAVING FOLLOWING BASIC FEATURES – MIN 5 TELEPHONE NUMBERS HAVING 16 DIGIT TELEPHONE NUMBER, PROVISION FOR MIN 3 MESSAGES .
10.	CONVENTIONAL GSM SPEECH AND SMS AUTO DIALER COMPATIBLE TO CURRENTLY INSTALLED CONVENTIONAL PANELS	GSM BASED, 03 VOICE MESSAGES, MIN 10 TELEPHONE NUMBERS
11.	SMART GSM(GPRS) COMMUNICATOR FOR HEALTH MONITORING OF OLD CONVENTIONAL PANELS	SIA DC-09/CID PROTOCOL ENABLED GSM(GPRS) COMMUNICATOR FOR HEALTH MONITORING OF OLD CONVENTIONAL PANELS
12.	SMART ETHERNET (IP) COMMUNICATOR FOR HEALTH MONITORING OF OLD CONVENTIONAL PANELS	SIA DC-09/CID PROTOCOL ENABLED ETHERNET (IP) COMMUNICATOR FOR HEALTH MONITORING OF OLD CONVENTIONAL PANELS
13.	SIM CARD WITH DATA CONNECTION PACKAGE RATE PER YEAR	WITH MIN 1GB DATA, 100 SMS PER MONTH
14.	SMART STANDALONE FIRE ALARM CONTROL PANEL WITH ONBOARD KEYPAD	2 ZONE SMART FIRE PANEL WITH CAPACITY OF 20 SMOKE DETECTORS PER ZONE. UL/ EN / ETDC/ CE CERTIFIED METAL CASE WITH PSTN AUTO DIALER. WIFI CLOUD CONNECTIVITY ON ANDROID APP. GSM/IP COMPATIBILITY FOR CONNECTIVITY TO THIRD PARTY CMS IN FUTURE THROUGH OPEN SOURCE PROTOCOLS. OPERATING VOLTAGE 180-240 V WITH VISUAL ZONE INDICATORS MAINS, BATTERY, SHOWING FIRE , OPEN, SHORT FAULT, RESET , ZONE AND HOOTER TESTS, ETC, PUSH BUTTONS TO DISABLE AUDIO ALARM WITH BATTERY BACKUP.
15.	CONVENTIONAL	4WIRED CONVENTIONAL SOUNDERS (02 FOR POWER & 02 FOR



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	SOUNDERS	TAMPER), MIN 120 DB
16.	SOUNDER WITH INBUILT BATTERY BACKUP	SOUNDER WITH MIN 120DB SOUND LEVEL, THAT SUPPORTS THE EVENTS OF TAMPER OR POWER CUT TO THE SOUNDER. HAVING UNBUILT BATTERY BACKUP FOR 24 HRS MIN
17.	PIR SENSORS(PET SAFE)	PIR SENSORS WITH QUAD LINEAR TECHNOLOGY, WITH PET IMMUNITY UPTO 25 KG
18.	PANIC SWITCHES	MICRO SWITCH TECHNOLOGY, AUTO RESET BUTTON, INBUILT TAMPER, STURDY ABS HOUSING WITH STAINLESS STEEL FINISH COVER PLATE
19.	MAGNETIC CONTACT	METAL MAGNETIC CONTACT SMALL
20.	VIBRATION SENSOR	WITH ADJUSTABLE SENSITIVITY SENSOR
21.	TEMPERATURE SENSOR	SECUIRCO/ EQUIVALENT
22.	SHUTTER SENSOR	SECUIRCO/ EQUIVALENT
23.	UV FLAME DETECTOR	ULTRAVIOLET FLAME DETECTOR
24.	LDR SENSOR	TO BE USED INSIDE STRONG ROOM
25.	GLASS BREAK SENSOR	GLASS BREAK SENSOR
26.	OPTICAL SMOKE DETECTOR	DUST PROOF, MOTH PROOF
27.	HEAT DETECTOR	CONVENTIONAL HEAT DETECTOR WITH WITH 360 DEGREES DIRECTION WITH MIN 25 DEGREES TRIGGER
28.	RATE OF RISE HEAT DETECTOR	ROR WITH RAPID RISE ELEMENT OF TEMPERATURE OF 6.7 DEGREES TO 8.3DEGREES CENTIGRADE INCREASE PER MINUTE
29.	RESPONSE INDICATOR	FOR ANY FIRE DETECTOR
30.	MCP	FOR FIRE ALARM,
31.	CONVENTIONAL BRANCH BURGLAR ALARM CONTROL PANEL WITH SPEECH AUTO DIALER AS A	OPERATING VOLTAGE 180-240 V , WITH EXTENDABLE ZONE INDICATOR, CAPABLE OF CATERING FOR ATLEAST 15 ALARM SENSORS WITH BATTERY BACKUP. WITH DAY AND NIGHT MODE WITH KEY/CODE TYPE OPERATIONS, METAL CASE WITH PSTN SPEECH AUTO DIALER INCLUDED.



SN	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
	PACKAGE	
32.	ADDRESSABLE FIRE ALARM FOR MULTI STORY BUILDING- WITH TWO LOOP SYSTEM	MICROPROCESSOR BASED ADDRESSABLE TYPE FIRE ALARM CONTROL PANEL.THE PANEL SHOULD BE EQUIPPED WITH SUFFICIENT NUMBERS OF LOOP WITH 20% SPARE CAPACITY, FOUR ACCESS LEVELS, CAPABLE OF AUTO LEARN DEVICES, FLASH EPROM SUFFICIENT NUMBERS OF PROGRAMMABLE RELAY CONTROLS FOR CONTROLLING AHUS, PRESSURIZATION FANS, VENTILATION FANS AT FIRE PUMP ROOM, MONITORING OF FIRE SPRINKLER AND FIRE HYDRANT PUMP, 240 VOLTS AC POWER SUPPLY, AUTOMATIC BATTERY CHARGER, 24 VOLTS SEALED LEAD ACID BATTERIES SUFFICIENT FOR 24 HOURS NORMAL WORKING AND THEN BE CAPABLE OF OPERATING THE SYSTEM FOR 2 HOURS DURING AN EMERGENCY CONDITIONS.4. SHOULD STORE 2100 EVENT WITH REAL TIME CLOCK WITH COUSE AND EFFECT UP TO 99 GROUPING FACILITY,2. INBUILT MODBUS FACILITY, SUPPORTS MICRO USB INTERFACE FOR PC CONNECTIVITY AND RS 485 COMMUNICATION FACILITY FOR NETWORK / REPEATER,7. SHOULD BE COMPATIBLE WITH THIRD PARTY CMS USING ITS OWN IP MODULE FOR COMMUNICATING OPEN PROTOCOLS LIKE SIA DC 09 PROTOCOL OR CONTACT ID . THE PANEL SHOULD CERTIFIED EN 54-2 AND EN54-4
33.	REPEATER PANEL	SUPPLY OF REPEATER PANEL WITH 128X64 DOTS GRAPHICS LCD DISPLAY. THAT SHOULD DISPLAY ALL EVENTS / DETECTORS, DEVICES STATUS OF COMPLETE SYSTEMS. CONNECTIVITY THROUGH RS-485 COMMUNICATION.LED INDICATIONS FOR FIRE & COMMON FAULT MODES ON FRONT PANEL. LOCAL BUZZER INDICATION FOR FIRE & FAULT. NO NEED OF SEPARATE POWER SUPPLY. POWER IS DRAWN FROM MAIN FIRE PANEL, FULL CONTROL OF MAIN FIRE PANEL FROM THE REPEATER PANEL. AUTOLEARN OF MAIN FIRE PANEL PROVIDED.
34.	ADDRESSABLE OPTICAL SMOKE DETECTOR	ADDRESSABLE OPTICAL SMOKE DETECTOR WITH ALARM LED'S AND MOUNTING BASE. APPROVALS- LPCB, VDS,UL
35.	ADDRESSABLE HEAT DETECTOR	ADDRESSABLE OPTICAL HEAT DETECTOR WITH ALARM LED'S AND MOUNTING BASE. APPROVALS- LPCB, VDS,UL
36.	ADDRESSABLE SOUNDER/ FLASHER	ADDRESSABLE HOOTER CUM STROBE. APPROVALS- LPCB
37.	ADDRESSABLE INPUT/ OUTPUT MODULES	I/O UNIT PROVIDES SUPERVISION OF ONE OR MORE NORMALLY OPEN CONTACTS CONNECTED TO A SINGLE PAIR OF CABLES AND A SET OF CHANGEOVER RELAY OUTPUT CONTACTS. APPROVALS- LPCB,VDS
38.	ADDRESSABLE MANUAL CALL POINT	ADDRESSABLE MANUAL CALL POINT WITH KEY FOR RST PURPOSE, APPROVALS- VNIPO (ALL RUSSION INSTITUTE FOR FIRE PROTECTION CERTIFICATE)



SN	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
39.	SWITCH MONITOR MODULE	ADDRESSABLE MONITOR MODULES FOR SPRINKLER FLOW SWITCH AND FOR OFFICE ETC. IT IS DESIGN TO MONITOR SINGLE POLE, VOLT FREE CONTACTS LIKE CONVENTIONAL DEVICES. APPROVALS-LPCB,VDS
40.	ZONE MONITOR MODULE	ZONE MONITOR WITH ISOLATOR POWERS AND CONTROLS THE OPERATION OF A ZONE OF UP TO 20 ORBIS . IN BUILD BIDIRECTIONAL SHORT CIRCUIT ISOLATOR APPROVALS-LPCB,VDS
41.	ADDRESSABLE FLAME DETECTOR	THE INTELLIGENT BASE MOUNTED UV FLAME DETECTOR IS DESIGNED TO PROTECT ENCLOSED INDOOR AREAS WHERE OPEN FIRES MAY BE EXPECTED. THE DETECTOR HAS A FAST ACTING RESPONSE TO FLAMES UP TO 25M AWAY AND IS EQUIPPED WITH A SINGLE UV SENSOR WITH A NARROW SPECTRAL RESPONSE IN ORDER TO DISCRIMINATE BETWEEN FLAMES AND MOST SPURIOUS SOURCES OF RADIATION
42.	BATTERY	12V 7 AH
43.	ACRYLIC STICKER (1FT X 1FT) WITH "EMERGENCY CALL POLICE" PRINTED IN RED ON IT FOR PANIC BUTTON IN ATM	TO BE FIXED BELOW THE PANIC BUTTON OF ATM BURGLAR ALARM.PANIC BUTTON CAN BE FIXED IN THE CENTER/ABOVE/BELOW THE STICKER AS PER CONVENIENCE.
44.	SHUTTER GUARD GSM BASED, WITH BUILT IN BATTERY AND BUILT IN HOOTER	GSM BASED , HOOTER IN-BUILT, IN-BUILT 3.7V LITHIUM ION BATTERY, ALERT THROUGH CALL, SMS AND INBUILT HOOTER ALARM*, LED INDICATORS FOR CHARGING & ACTIVITY, MINIMUM 5 PHONE NUMBER FOR ALERTS, PROGRAMBLE ENTRY/EXIT DELAY TIME, PASSCODE PROTECTED
45.	CASH CABIN ALARM	WITH MAGNETIC CONTACT AND BEEP SOUND TO ALERT THE CASHIER WHEN THE CASH CABIN DOOR IS OPEN. WITH/WITHOUT INBUILT BATTERY. DELAY ADJUSTABLE.
46.	ULTRASOUND PEST REPELLENT	ULTRASOUND PEST REPELLENT WITH OR WITHOUT INBUILT BATTERY
47.	ARMORED CABLE 2 CORE 1.5 SQ MM, ISI MARKED	FOR FIRE DETECTORS
48.	CABLE OF 2 CORE COPPER SHIELDED 2 X 1.0 SQ MM, FLEXIBLE WIRE. (NOT REGULAR OR ARMoured)	FOR SIREN AND SWITCHES OF INTRUSION ALARM



SN	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
49.	CABLE OF 4 CORE COPPER SHIELDED 4 X 0.5 SQ MM, FLEXIBLE WIRE (NOT REGULAR OR ARMOURED)	FOR PIR, VIBRATION SENSOR AND INCOMING POWER SUPPLY FOR PANEL
50.	PVC ROUND CONDUIT WHITE COLOUR	
51.	BLACK CONDUIT	
52.	SURGE PROTECTOR WITH 6 SOCKETS (IN LIGHTNING EFFECTED/ HEAVY POWER FLUCTUATIONS AREAS)	6 SOCKETS



3. TRTL SAFES

SL	ITEM	MINIMUM DESIRED SPECIFICATIONS FOR SUPPLY AND INSTALLATION
1.	"TRTL BB" Safe	Safe having torch and tool resisting capacity on all six sides for 15 minutes each, Electronic / Biometric login for key holders, Duress - Send alarm to user in distress situation, Automatic relocking device (on attack on the lock). In built Alarm generating capacities, 8 Lever High Precision Locks, Alert system in case of any burglary attempt. Motion sensor light inside TRTL.
2.	"TRTL A" Safe	Safe having torch and tool resisting capacity on all six sides for 30 minutes each, Electronic / Biometric login for key holders, Duress - Send alarm to user in distress situation, Automatic relocking device (on attack on the lock). In built Alarm generating capacities, 8 Lever High Precision Locks, Alert system in case of any burglary attempt. Motion sensor light inside TRTL.

