

INTRODUCTION

ICNS is a communication engineering company that develops innovative products for the life-safety industry and BMS (Building Management Systems).

ICNS products are designed to support a diverse range of protocols with a modular interface structure allowing for the rapid introduction of new protocols and emerging technologies.

ADVANTAGES

- Detailed event information from fire panels and BMS devices
- Supports multiple protocols
- Global notification of events via smartphone notification, SMS or email to selected users
- Wifi/Ethernet/4G/LTE cloud link
- Configurable via a web browser

PRODUCTS

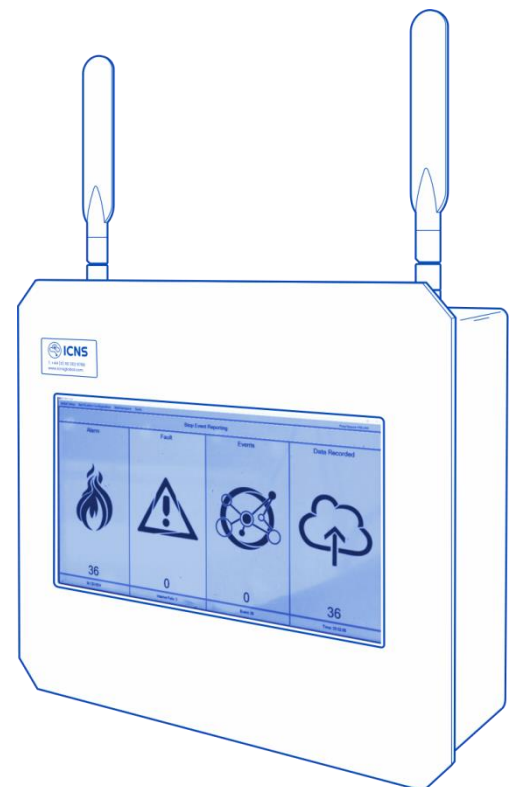
IRIS200 (CLOUD CONNECTION OPTIONAL)

Site Gateway for ICNS Event Routing

The IRIS200 is an industrial cloud event interface and display with live event notification via SMS and push notification.

Features

- Bluetooth Interface to ICN001/2
- RS-232 & Ethernet to FAP
- WiFi Interface to Router (2.4GHz & 5GHz)
- High Gain External WiFi Antennas
- Ethernet Interface to LAN
- HDMI & RGB Display Interface
- Dual location Event Archiving
- Smartphone App Notification
- SMS & Email Notification Supported
- Basic Fire, Fault, Network & I/O Event display supported with Graphics
- Multiple Protocols Supported

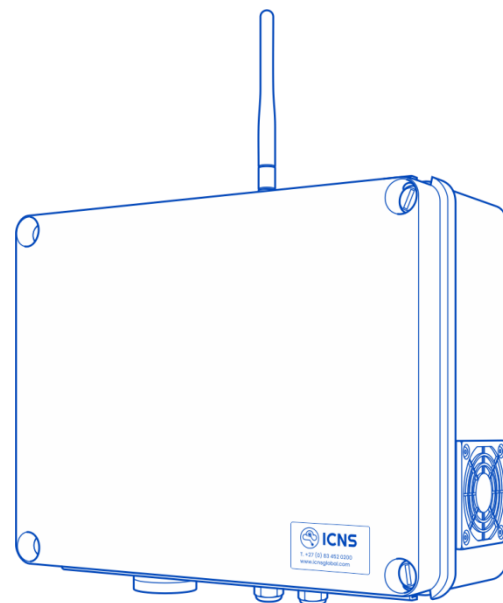


IRIS-DU50 DISPLAY UNIT

A remote display unit for the IRIS-X Monitoring and Notification System

Features

- LAN to IRIS-X communication interface
- HDMI and RGB display interface
- Multiple protocols supported
- All IRIS-X functionalities supported with the exception of notification and cloud repository features



CEVIEW

The ICNS CEVIEW Application monitors events that occur remotely. Users can generate real time incident reports and bespoke reports for the purpose of maintenance and audit.

Event Monitoring

All events occurring on the fire panel are displayed on the Live Event view and can be downloaded as a report for a specific time period.

Fault Reporting

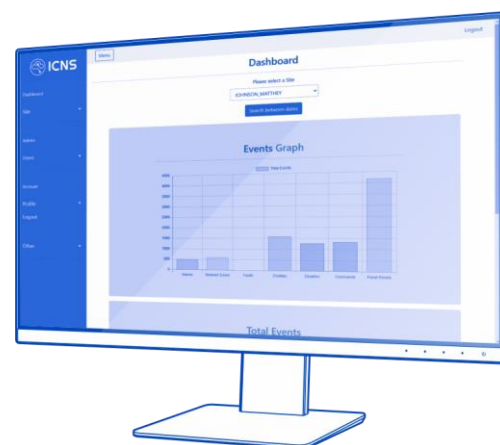
The web application displays if a site is experiencing a fault and any network errors.

Live Monitoring

The web application is connected to a database and is being constantly updated from the fire panel for a live view.

Features

- Remote monitoring. User can see all live events such as Fires, Faults, I/O and Network Errors
- Live event data, straight from the installed fire panel
- Incident report generation
- Tailored reporting for maintenance and auditive purposes

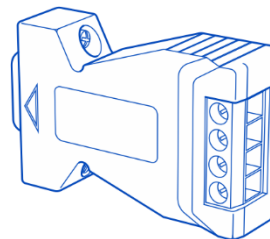


IRL001

RS-232 to RS-485 converter for industrial applications.

Features

- Serial port power supply. No need for external power supply
- Communications 1.2K~115.2Kbps
- Communications distance of 1.2km on the RS-485 side is 1.2Km (19.2Kbps)
- A maximum number of 128 nodes
- 15KV static protection and 600W/ms lightning protection

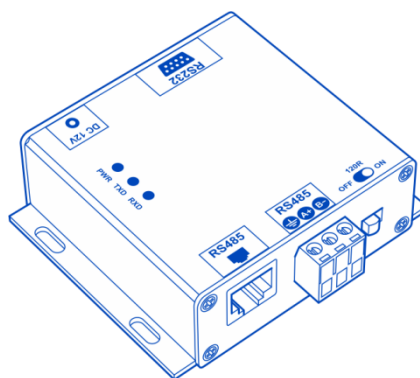


IRL002

High power RS-232 to RS-485 converter.

Features

- RS-485 transmission distance of 1200m
- RS-232 transmission distance of 15m
- Transmission rate 300~115200bps
- Three LED indicators for checking power connection and signal transmit and receive status

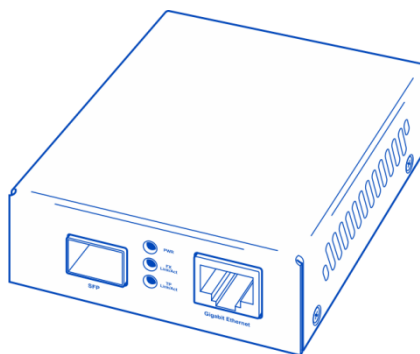


IOL001

The IOL (Interface optic link) is a media converter designed to convert 1000BASE-SX/LX fibre to 1000Base-T copper media or vice versa.

Features

- Designed for use with multi-mode/single-mode fibre cable utilising the LC-Type connector
- Works at 850nm on both transmitting and receiving data when adopting multi-mode fibre and 1310nm on both transmitting and receiving data when adopting single-mode.001
- IOL001 can transmit at extended fibre optic distances utilising multi-mode fibre up to 0.55km and 10 km when using single-mode fibre



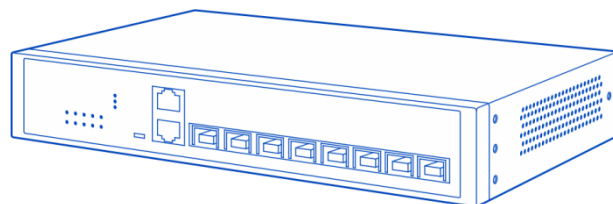
IOL002

Interface optic link with multiple inputs

A full 10 Gigabit Layer 3 network management switch with a high-performance hardware and software platform, provides full 10 Gigabit optical ports, supports Layer 3 routing protocols, with complete security protection mechanisms.

Features

- 8 x 10G / 1000Mbps SFP ports
- ACL/QoS strategy and rich VLAN functions are easy to manage and maintain
- Micro USB Console port



Supports

- RIP dynamic routing, static routing, ARP proxy
- DHCP server, DHCP Relay, DHCP Snooping
- Four element binding, ARP/IP/DoS protection, 802.1X authentication
- VLAN, QoS, ACL, spanning tree, multicast, IPv6
- Support Web network management, CLI command line, SNMP

1. EVENT DISPLAY PANEL APPLICATION, USING VLAN

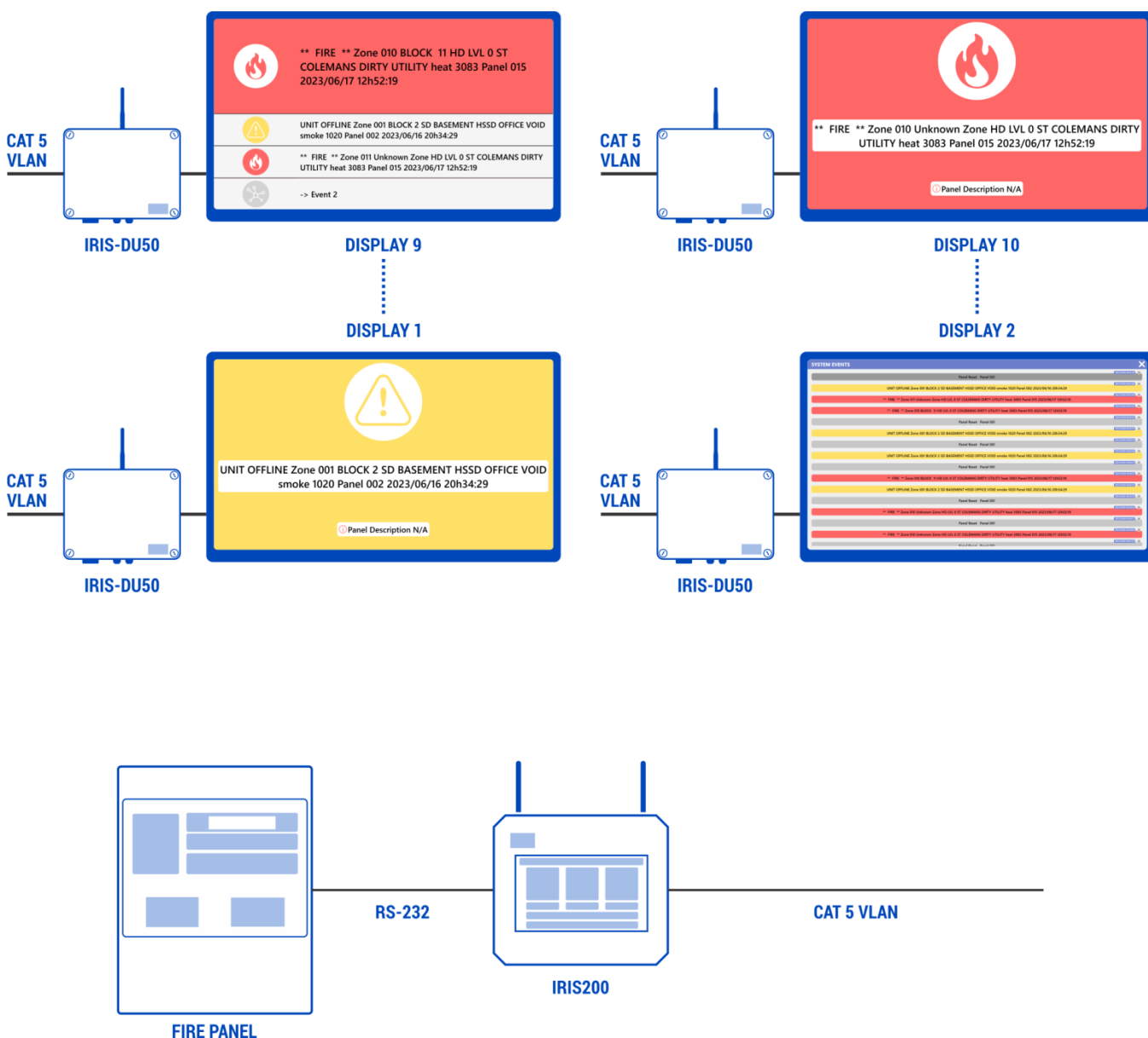


FIGURE 1: EVENT DISPLAY PANEL APPLICATION, USING VLAN

2. EVENT DISPLAY PANEL APPLICATION, USING VLAN, WITH REMOTE MONITORING NOTIFICATION AND REPORT GENERATION WITH LOCAL EVENT DISPLAY, REDUNDANT DATABASE AND LOCAL REPOSITORY

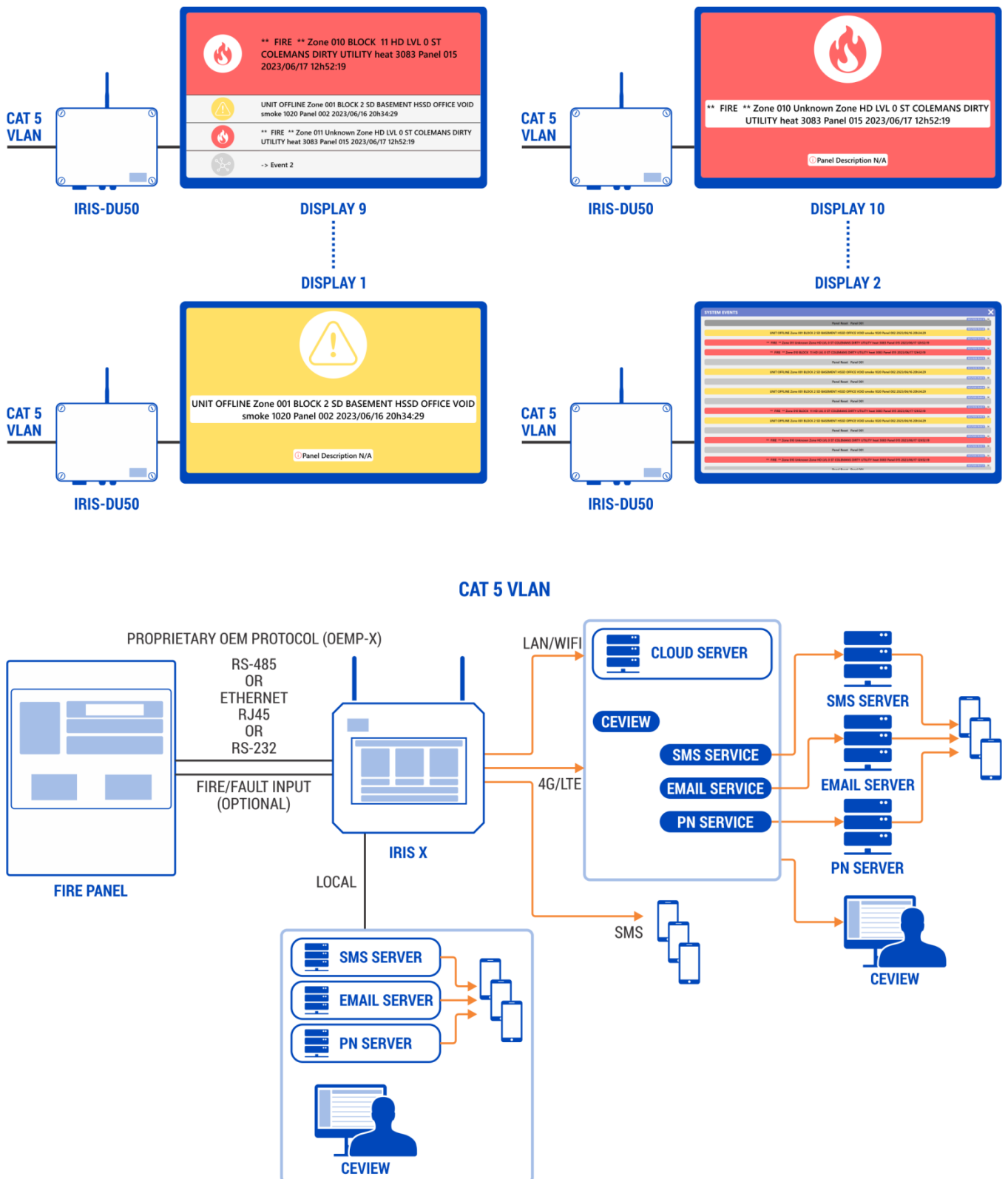


FIGURE 2: EVENT DISPLAY PANEL APPLICATION, USING VLAN, WITH REMOTE MONITORING NOTIFICATION AND REPORT GENERATION WITH LOCAL EVENT DISPLAY, REDUNDANT DATABASE AND LOCAL REPOSITORY

3. EVENT DISPLAY PANEL APPLICATION, USING RS-485

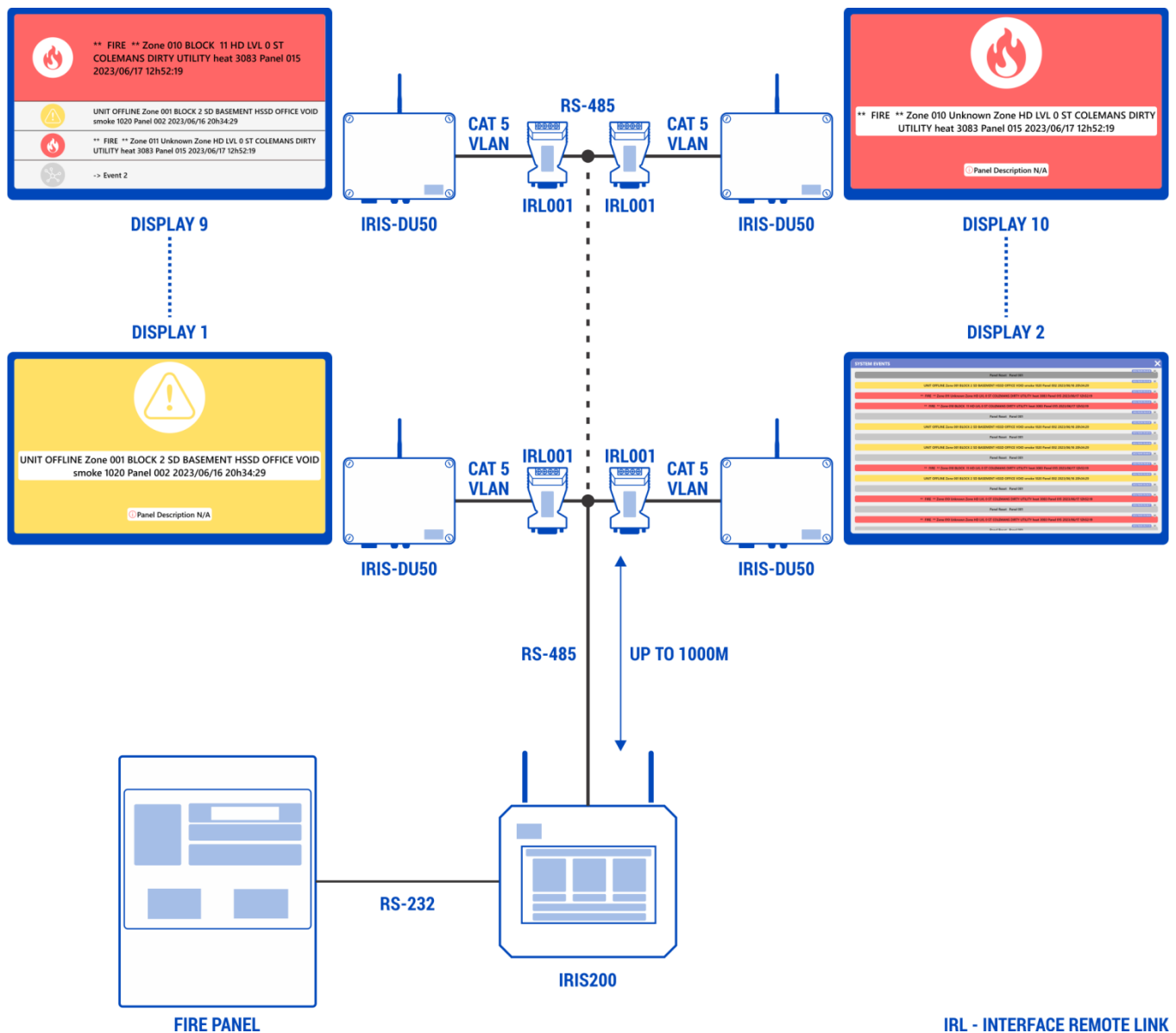


FIGURE 3: EVENT DISPLAY PANEL APPLICATION, USING RS-485

4. EVENT DISPLAY PANEL APPLICATION, USING OPTIC FIBRE

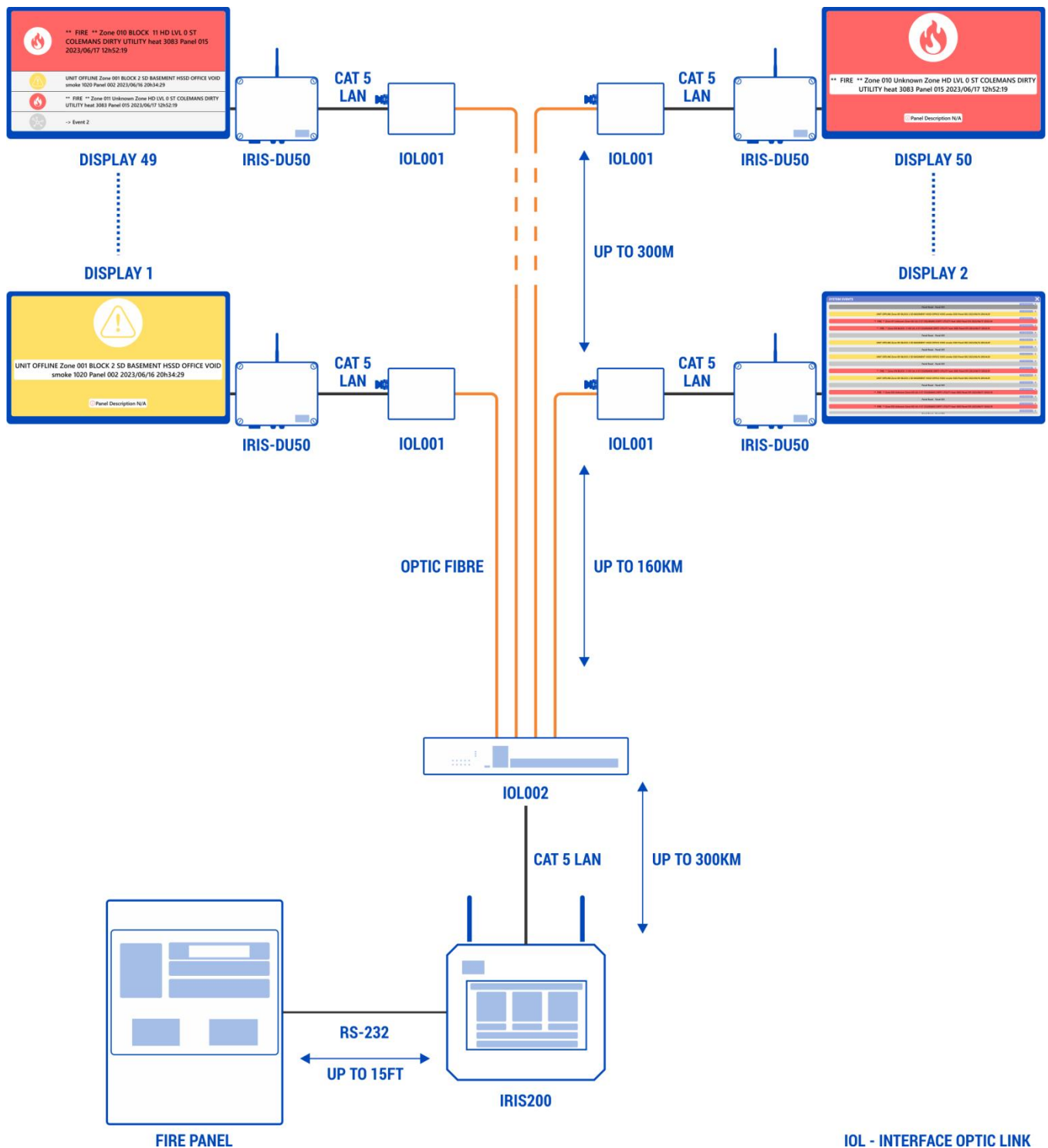


FIGURE 4: EVENT DISPLAY PANEL APPLICATION, USING OPTIC FIBRE

5. LOCALLY HOSTED EVENT DISPLAY SYSTEM WITH NO EXTERNAL CONNECTIVITY

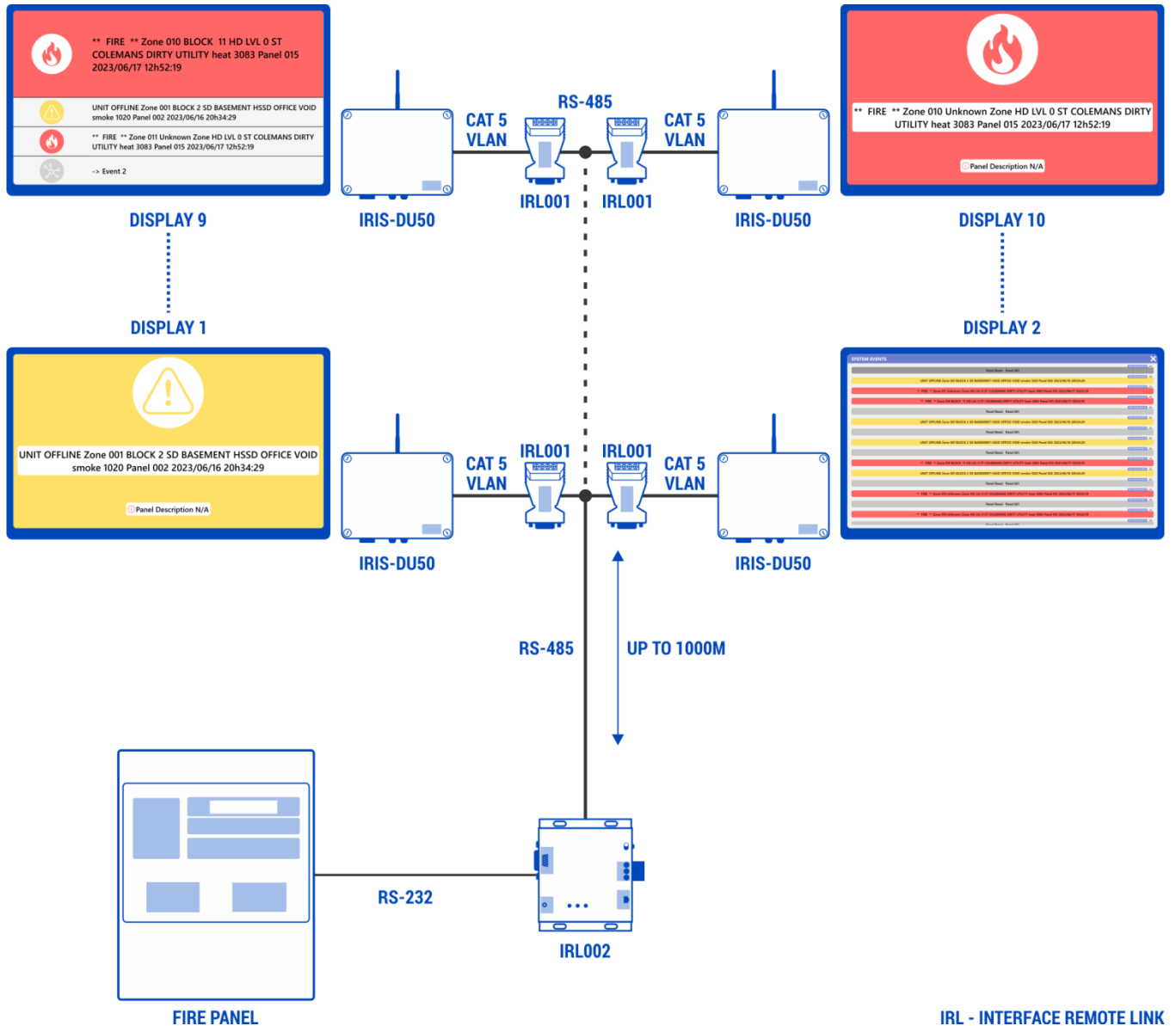


FIGURE 5: LOCALLY HOSTED EVENT DISPLAY SYSTEM WITH NO EXTERNAL CONNECTIVITY

6. LOCALLY HOSTED EVENT DISPLAY SYSTEM WITH NO EXTERNAL CONNECTIVITY, USING OPTIC FIBRE

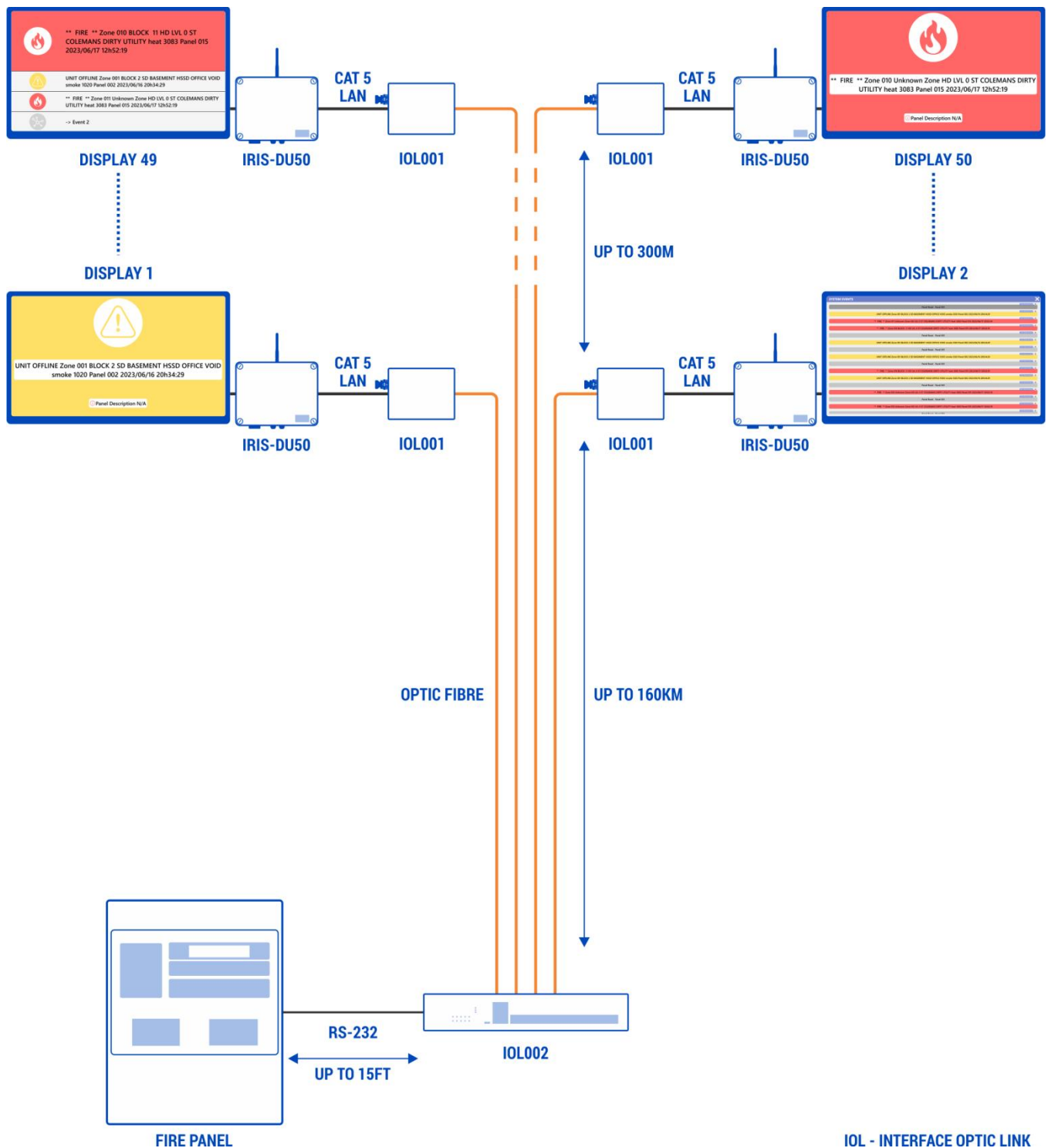


FIGURE 6: LOCALLY HOSTED EVENT DISPLAY SYSTEM WITH NO EXTERNAL CONNECTIVITY, USING OPTIC FIBRE

SPECIFICATIONS

IRIS-DU50

DIMENSIONS	
Dimensions	252mm x 198mm x100mm
Weight	1.74kg
Form Factor	Small Form Factor
Screen Resolution	3840 x 2160 pixels
PROCESSOR	
Brand	Intel
Type	Celeron
Speed	2.7 GHz
Count	2
RAM Size	8 GB
Memory Technology	DDR4 SDRAM
Maximum Memory Supported	8 GB
Hard Drive Size	128GB
Hard Disk Description	SSD
Hard Drive Interface	Solid State
Graphics Coprocessor	Intel UHD Graphics 600
Graphics Chipset Brand	Intel
Connectivity Type	Wi-Fi
Wireless Type	Bluetooth
Hardware Platform	Windows
Operating System	Windows 11 Pro

IRIS-DU50 BACKUP POWER SUPPLY

AC INPUT	
Voltage Range	90VAC~264VAC
Frequency	50 or 60Hz
DC OUTPUT	
Voltage	12VDC $\pm$ 5%
Max Power	25W (2.1A)
Continuous Power	12W (1A)
BATTERY	
Type	Lithium-ion
Nominal Voltage	3.6VDC
Capacity	3350mAh
Typical Charging Time	3.6 hours to 90% Capacity
PHYSICAL	
Input Plug	Mounted on housing (NEMA / Schuko/UK)
Output Cable	2m - DC Male Jack (OD 5.5mm ID 2.1mm)
Dimension DxWxH (mm)	68x42x74
Weight	280g
Surge Protection	K.21 Enhanced 6KV

IRIS200

SYSTEM	
Processor	Intel Atom® x5-E3930 Processor, Dual Core, 2M Cache, 1.3GHz (1.8GHz), 6W
Memory	2GB/4GB/8GB Memory Down, Dual Channel LPDDR4 2400MHz
BIOS	Inside SPI 128Mbit (supports UEFI boot only)
GRAPHICS	
Controller	Intel® HD Graphics
Feature	OpenGL 4.2, Direct X 11.1, OpenCL 1.2, OGL ES 3.0 HW Decode: H.264, MPEG2, VC1, VP8, H.265, MPEG4, MVC, VP9, WMV9, JPEG/MJPEG HW Encode: H.264, MPEG4, VP8, H.265, MVC
Display	1 x VGA/DVI-D 2 x Mini-DP/Micro-HDMI VGA: resolution up to 1920x1200 @ 60Hz DVI-D: resolution up to 1920x1200 @ 60Hz Mini-DP: resolution up to 4096x2160 @ 60Hz

	Micro-HDMI: resolution up to 3840x2160 @ 30Hz	
Triple Displays	VGA + 2 Micro-HDMI	DVI-D + 2 Mini-DP
EXPANSION		
Interface	1 x Full-size Mini PCIe (PCIe/USB/SATA) 1 x M.2 (2242 B Key) (PCIe/USB/SATA) 1 x M.2 (2230 E Key) (PCIe/USB)	
AUDIO		
Audio Codec	Realtek ALC262	
ETHERNET		
Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)	
LED		
Indicators	1 x Power LED 1 x HDD LED	
FRONT I/O		
Ethernet	2 x GbE (RJ-45)	
Serial	1 x RS-232/422/485 (DB-9)	
USB	2 x USB 3.0 (type A) 2 x USB 2.0 (type A)	
Audio	1 x Mic-in	
Buttons	1 x Power Button	
Switch	1 x Power Switch (2-pin)	
REAR I/O		
Serial	1x DB9 RS-232/422/485 (default), or change to 8-bit DIO by jumper select	
Display	1 x VGA/DVI-D 2 x Mini-DP/Micro-HDMI	
Audio	1 x Line-out	
Wi-Fi Antenna	2 x Wi-Fi Module Antenna Hole	
WATCHDOG TIMER		
Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
POWER		
Type	Wide Range 9~36V	
Connector	DC Jack	
OS SUPPORT (UEFI ONLY)		
	Windows 10 IoT (64-bit) Linux	Linux Yocto Project (64-bit)
MECHANISM		
Construction	Aluminum	
Mounting	Wall/VESA/DIN Rail Mount (available upon request)	
Dimensions (W x H x D)	161mm x 35.1mm x 108.2mm	
Weight	700g	
ENVIRONMENT		
Operating Temperature	N4200: -20 to 60°C (standard) E3940, E3930: -20 to 60°C (standard), -40 to 70°C (wide-temp) With 0.4m/s Air Flow	
Storage Temperature	-40 to 85°C	
Relative Humidity	10 to 90% RH (non-condensing)	
STANDARDS AND CERTIFICATIONS		
Shock	Operating: 3G, 11ms Non-Operating: 5G, 11ms	
Vibration	Operating: Random 5~500Hz, IEC68-2-64 (3G) Non-Operating: Sine 10~500Hz, IEC68-2-6 (3G)	
Certification	CE, FCC Class B, RoHS, UL	

IRL001

INTERFACE REMOTE LINK (RS-232 to RS-485 Converter For Industrial Applications)	
Dimensions	56.3mm x 33.5mm x 15.8mm
Weight	38g
Power	Serial port power supply. No need for external power supply
Working current	Less than 10mA
Communication rate	1.2K~115.2Kbps
Communication distance	The communication distance on the RS-485 side is 1.2Km (19.2Kbps)
Maximum number of nodes	128 nodes
Protection voltage	15KV static protection and 600W/ms lightning protection
Temperature	-20°C ~70°C

IRL002

INTERFACE REMOTE LINK (High Power RS-232 to RS-485 Converter)	
Dimensions	185mm x 134mm x 50mm
Weight	280g
Converter type	RS-232 to RS-485
Transmission distance of RS-485	1200m
Transmission distance of RS-232	15m
Transmission rate	300~115200bps
Connectors & Pinout Definition	Screw Terminal And RJ45 Connector For RS485
Indicators	Onboard 3x LED Indicators For Checking Power Connection And Signal TX/RX Status
Enclosure	Aluminium alloy

IOL001

GENERAL	
Standards	IEEE 802.3, IEEE 802.3i, IEEE 802.3ab, IEEE802.3ab, IEEE802.3z
LED	PWR, FX Link/Act, TP Link/Act
Interface	For MC200CM/MC210CS: SC fibre connector, RJ-45 jack For MC220L: SFP port, RJ-45 jack
Twisted-Pair	10Base-T: 2-pair UTP/STP of Cat. 3 or above (≤100m) 100Base-TX: 2-pair UTP/STP of Cat. 5 or above (≤100m) 1000Base-T: 4-pair UTP/STP of Cat. 5e or above (≤100m)
Fibre	For MC200CM: 62.5/125um multi-mode fibre (≤220m); 50/125um multi-mode fibre (≤550m) For MC210CS: 9/125um single-mode fibre (≤15km) For MC220L: depends on the used SFP module
Wave Length	For MC200CM: 850nm For MC210CS: 1310nm For MC220L: depends on the SFP module used
ENVIRONMENTAL AND PHYSICAL	
Operation Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Operation Humidity	10% to 90%RH non-condensing
Storage Humidity	5% to 90%RH non-condensing

IOL002

DIMENSIONS	
Dimensions	250mm x 158mm x 44mm
ENVIRONMENTAL AND PHYSICAL	
Operation Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Operation Humidity	10% to 90%RH non-condensing
Storage Humidity	5% to 90%RH non-condensing
Transmission Rate	10000 Mbps
Power	Input power: 100~240VAC, 50/60Hz