Technical Specifications

Chapter 10 – Technical Specifications

10.1 Environmental

Sealed enclosures are rated IP65, NEMA 4x, and can be installed indoors only in a Pollution Degree 2, 10 to 95 %RH Non-Condensing environment that affords total protection from rain, snow and direct sunlight.

Operating Temperature	-10 °C to + 55 °C certified range
Storage Temperature	-25 °C to + 60 °C
Operating Humidity (closed)	10 to 90 %RH (non-condensing)

10.2 User Interface and Main Module

LCD Touch Screen Type	7’ TFT Colour LCD with LED Backlight (resistive touch screen) 800 x 480 pixels (WVGA) Resolution Active area 155.08 mm (H) x 86.92 mm (V)
Front Display	Green Power LED
	Red Alarm LED
	Yellow Fault/inhibit LED
	Alarm Mute /Reset Push Button
	Alarm Buzzer (Sound Level: 70 dB at 1 m)
Communication Outputs	1) 10/100 Mbps Ethernet Interface with standard RJ-45 connector 2) RS-485 Modbus connections supporting 115.2 kbps max.
Output Relays	Two configurable and one fixed System State Relays: 1.7 A @ 250 VAC, 1.7 A @ 30 VDC (non-inductive load)
Dedicated Audio and Visual alarm	Four outputs to external devices Supply voltage Vs (18 – 32 VDC) –1.8* VDC (max), max 300 mA per channel *Voltage drop at ambient temperature
Remote Terminals	Optional remote acknowledge, reset and inhibit
Module Power Consumption	4.4 W for User interface module and Main Module (Max 33.2W @ Audio/Visual Alarm device connected)

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10.3 I/O Modules

10.3.1 mA Input Module

Description	8-channel Analogue Input Module for 2-wire or 3-wire 4 – 20 mA detector signals
Sensor Configuration	2-wire or 3-wire current source
Signal Measurement Range	0 **–** 24 mA
Sense Resistance	66 Ω
Module Power Consumption	Max 0.4 W (Excludes power to mA detector)
Field Device Power Supply Vmax (⎓)	Supply voltage Vs (18 **–** 32 VDC) –*1.8 VDC (max) *Voltage drop in Touchpoint Plus Wireless
Field Device Power Supply Power max (single channel)	20 W
Field Device Power Supply Power max (eight channels)	40 W
Maximum cable length for mA Input loop (Rloop)	Rloop = (Vcontroller – 1.8 VDC – Vdetector min) / Idetector Maximum Cable run length = Rloop / (Ω per metre) Example: Vcontroller = 24 VDC, TPP Voltage drop = 1.8 VDC, Vdetector = 18 VDC (18 to 32 VDC), Idetector = From detector specification.

10.3.2 Relay Output Module

Description	12-channel Relay Output Module incorporating 12 single pole change over (SPDT) relays
Power Consumption Maximum	2.5 W (with all relays energised)
Relay Contacts (~ / ⎓)	1.7 A @ 250 VAC / 17A @ 30 VDC,
Relay Operation	Individually configurable for – normally energised / de-energised operation

10.3.3 Wireless Module

Description	64 wireless node connection without RAEMet
Power Consumption Maximum	1.2 W (with RAEMet)
Wireless	2.4GHz IEEE 802.15.4/ mesh radio

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10.4 Power Supplies

10.4.1 External Supplies

SMPS Power Supply	156 W
AC Input Voltage Range (~)	AC 110/220 V ±10 % of nominal (manual switching)
DC Input Voltage Range (⎓)	DC 18 – 32 V SELV Supply
Input Frequency Range (~)	AC 50 – 60 Hz ± 6 %
Output Voltage (⎓)	DC 24 V
Dimension	199 x 98 x 38mm (L x W x H)

10.4.2 Backup Battery

Description	22.2 V Lithium - ion Battery, 2600mAh
Dimensions/Weight	124.8 x 78.9 x 29.2 mm, 425g
Operating Temperature	0 – 50 °C
Operating Humidity	10 to 90% RH (non-condensing)
Storage Life Limitations	1 year: –20 °C to +25 °C (–4 °F to +077 °F) 3 months: –20 °C to +45 °C (–4 °F to +113 °F) 1 month: –20 °C to +60 °C (–4 °F to +140 °F)
Storage Lifetime without re-charge	1 year
Input Current (charging) (⎓)	DC 24 – 32 V @ 0.25 mA max.
Output Voltage (when supplying) (⎓)	17.4 – 25.2 VDC
Maximum Input Current	250 mA

10.5 Enclosures

10.5.1 Wall Mount Enclosure

Material	PC ABS
Cable Gland Plug	PG16
Environmental Protection	IP65 (when fully closed and locked), NEMA 4x indoor
Operating Humidity	10 to 90 %RH (non-condensing)
Mounting Bracket – Dimension	W 423 x D 325 x H 16.5 mm, 1.5 kg (approx)
Weight	8.5kg
Dimension	426 mm x 300 mm x 156 mm (16.9 ins x 11.8 ins x 6.2 ins)