



Astute HV Monitoring[®] Service

Hardware Specification



The Hub is available as a wall-mounted unit.

- Provides power and communications to the Nodes
- Communicates via the Web, SMS, and email (chargeable option, subject to customer IT infrastructure)
- Receives, collates, and analyses data from the Nodes
- Can support up to 96 TEV measuring points
- Can support up to 96 Ultrasonic measuring points
- Produces data display screens including:- Phase Resolved Partial Discharge (PRPD), TEV, Ultrasonic, RFCT and Environmental Level Trending, RFCT Waveform Capture, Ultrasonic Sound Files
- Indicates location and severity of all PD activity
- Multiple configurable alarms
- Windows 10 operating system
- 8GB RAM
- 120GB SSD HDD
- Power supply 110/240V 50/60Hz
- Modbus TCP integration available
- IEC61850 integration available



TEV	
Measurement Range	0 – 60 dBmV
Pass Band	3 to 80 MHz
Maximum Sensitivity	1mV
Pulse Polarity	Positive or negative
Resolution	1dB
Accuracy	±1dB
Precedence Resolution	1ns
Number of Channels	2 per node

ULTRASONIC	
Measurement Range	-7 dBμV to 68dBμV
Resolution	1dB
Accuracy	±1dB
Transducer Sensitivity	-65 dB (0dB = 1volt/μbar rms SPL)
Transducer Centre Frequency	40 kHz
Transducer Diameter	16mm
Number of Channels	2 per node

INDICATORS	
Power LED	Bi-colour Red/Green LED
Status LED	Bi-colour Red/Green LED
TEV State	Bi-colour Red/Green LED
Ultrasonic State	Bi-colour Red/Green LED
Cable PD State	Bi-colour Red/Green LED

CONNECTORS	
Power and Comms Signals	2 off RJ45
External TEV Sensor	1 off BNC socket
Ultrasonic Sensor	2 off 5-pin Lemo socket
Cable PD Sensor	1 off 3-pin Lemo socket
Relative Humidity Sensor	1 off micro USB
Aux Power Connector	1 off 2-pin Lemo socket

ENVIRONMENTAL	
Operating Temperature	0 – 50 degrees C
Humidity	0 – 90% RH non-condensing
IP Rating	53

POWER SUPPLY	
Low Voltage DC	48V, 80 mA

DIMENSIONS	
Size	155 x 135 x 55mm
Weight	0.45kg

EMC	
Safety Class	0 – 50 degrees C
EMC Immunity	Industrial Levels
EMC Emissions	Industrial Levels



Safer, Stronger, Smarter Networks

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