DualSentry
Distributed Acoustic Sensor

DETECTOR UNIT (FRONT AND REAR VIEW)

PROCESSOR UNIT (REAR VIEW ONLY)

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Monitored | Secured | Safe

PROCESSOR UNIT SPECIFICATIONS

PROCESSOR UNIT SPECIFICATIONS	
Main Processor	AIMB-787G2
Processor	Intel i7 10700
BIOS	AMI 64 Mbit SPI
Memory: RAM	16GB
Memory	1TB Solid State Drive 2*1 TB HDD (as RAID1)
GRAPHICS	
Graphics Card	GeForce GTX1650
INTERFACES	
USB	Front: 2 , Rear: 4
Serial	Rear: 1
PS/2	Front: 1 (keyboard) / Rear: 2 (1 x keyboard and 1 x mouse)
HDMI / DVI / Displayport	Yes (1 of each)
VGA	No
Ethernet	2x connection to DualSentry DU, 1x user connection (network switch / SCADA etc.) 1x reserved (remote login / maintenance)
ELECTRICAL	
Input Voltage	AC 100 ~ 240 V
Power Consumption	300W
Power Supply Safety	UL / TUV / CB / CCC
Power Supply MTBF	100,000 hours @ 25 °C
PHYSICAL	
Dimensions	482mm x 450mm x 177mm (4U)
Shipping Dimensions	610mm x 330mm x 560mm
Weight	12.5 kg (18kg Shipping weight)
System Fan Detail	1 (12 cm / 77 CFM)
ENVIRONMENTAL	
Temperature	Operating: 0° to +40 °C Storage -20 ° to 60°C
Humidity	Operating: 10 ~ 85% @ 40°C, non-condensing Storage: 10 ~ 95% @ 40°C, non-condensing
Vibration (5 ~ 500 Hz)	Operating: 1Grms / Non-Operating: 2 G
Shock	Operating: 10 G (with 11 ms duration, half sine wave) / Non-Operating: 30 G
OPERATING SYSTEM AND SOFTWARE	
Operating System	Windows 11 Pro
Software	DASCM

DETECTOR UNIT SPECIFICATIONS

DualSentry DETECTOR UNIT SPECIFICATIONS	
Range per channel*	5km or 10km
Number of channels	2
Ordering Part Numbers (full system)	DAS-SNT-03-05-02CH/DS System DAS-SNT-03-10-02CH/DS System
DATA ACQUISITION	
Acquisition Frequency**	2kHz default - 1kHz/2kHz/4kHz as standard
Event accuracy resolution	1 to 5m
OPTICAL	
Laser Wavelength	1550 nm
Optical Budget	5 dB
Connector Type	FC / APC
Cable type	Single mode 9/125
Cable Installation Method	Fence Mounted and/or Buried Cable (see installation guide)
Bandweaver Cable	FenceLine or CovertLine as standard, Other cables available on request
Laser Safety Classification	Class 1
ELECTRICAL AND HARDWARE INTERFACES	
Supply Voltage	100V-240V AC
Power Consumption	30W (typical) / 40W (max)
Relays	20 Relays outputs plus 2 on/off inputs
Serial	RS485 to control additional relays
PHYSICAL	
Dimensions	431mm x 384mm x131mm (3U)
Shipping Dimensions	570mm x 530mm x 320mm
Weight	10 kg (13.8kg Shipping Weight)
IP Rating	IP40
Material	Painted Steel
Colour/Finish	Matt Black
Shipping dimensions	570 x 330 x 540 mm
Shipping Weight	15 kg
ENVIRONMENTAL	
Operating Temperature	-10° to +55°C
Operating Humidity	0 to 95% RH, Non-condensing
Storage Temperature	-10°C to +85°C
Storage Humidity	0 to 95% RH, Non-condensing
SAFETY AND APPROVALS	
Laser Safety	IEC60825-1
CE - EMC	EMC 2014/30/EU - EN 61000-6-3:2007+A1:2011 EN 61000-3-2:2014 EN 61000- 3-3:2013 EN 61000-6-1:2007
CE - LVD	LVD 2014/35/EU - IEC 61010-1:2010 EN 61010-1:2010
CE - RoHS	Yes
FDA	FDA Ascension number 2422248-000
FCC	47CFR Part 15:2017 ANSI C63.4:2014

*Range is dependent on the optical quality of the sensing cableroute. This can be confirmed upon reviewing an OTDR trace vs the planned optical budget.

**Specific acquisition frequency is dependent on range and algorithm type. 10-20KHz available on request for select units

The above specifications are provided as guidance only and cannot be guaranteed to be exact, and Bandweaver will supply the equivalent or better.