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MASTERS OF MACHINE HEALTH

DEFENSION AND MONITOPING SYSTEM

REAL-TIME ONLINE PROTECTION AND MONITORING SYSTEM

www.erbessd-intruments.com



Engineered for versatility, the **DEFIANT 16-channel interface** supports a wide range of signals and seamlessly integrates with multiple sensor types.

Fully **compatible** with our **PHANTOM** sensors, **DEFIANT** is more than just a tool—it's a path to smarter, seamless monitoring tailored to meet every industrial requirement.

DEFIANT provides unparalleled data visualization alongside **remote access capabilities**, empowering you to stay connected from anywhere.



REAL-TIME MONITORING (WIRED CHANNELS)	
Channels	8 or 16 (depending on the version)
Data acquisition	Simultaneous reading (no multiplexing)
Sample rate	32kS/s
Fmax	12.5kHz
Resolution	16-bit
Sensor support	IEPE Accelerometers, pulse-train ouput sensors, proximity probes, displacement sensors, 4-20mA (<i>with an external adapter</i>), current transformers and any voltage-output sensor (<i>AC and DC</i>).
Voltage input ranges (AC)	±2.5 V, ±5. Vv, ±10 Vv (selectable per channel)
Voltage input ranges (DC)	0-5 V, 0-10 V, 0-12 V (selectable per channel)
Recording types	Interval-based, time-of-day, overall-triggered
Short Burst Waveform Recording	3,276,800 lines of resolution (102 seconds)
Long-Term Waveform Recording	Continuous recording, viewable in windows up to 100 seconds
Vibration monitoring real time overalls	Standard overalls: Acceleration, velocity, displacement, acceleration envelope, crest factor, kurtosis, skewness, peak to peak, etc.
Monitoring speed	<10ms depending on channels and overalls enabled
Connector type	Terminal block plug 3 positions, 3.81mm pitch (DC input, AC input and Ground)
Storage	256GB SSD (up to 3 days of continuous data recording for 16 channels)



DIGITAL INPUT/OUTPUTS		
Number of channels	4	
Channel types	Configurable as Dry Contact input or 0-12V/150mA digital output	
Output channel control	Based on overall alarms	
Connector type	Terminal block plug 2 positions, 3.81mm pitch	
WIRELESS SENSOR SUPPORT		
Sensors support	Compatible with the full line of Phantom Wireless sensors (vibration, speed, current, etc)	
Wiress range	100 m line sight / 500 m line sight <i>(long range mode)</i>	
Wireless sensor protocol	BLE 5.0	
Operating frequency	2.4 Ghz	
Transmission Power	+/-8dBm	
Antenna connector (for BLE)	RP-SMA Male connections	
Antenna Gain (for BLE)	2.4Ghz Antenna 3dBi	
SOFTWARE SUPPORT		
Analysis Software	Built-in, also compatible with Digivibe MX And Wiser Vibe	
Cloud service support	El Analytic (eianalytic.com) for cloud vibration monitoring, analysis and alarm notifications	
Industrial protocols (overalls only)	Modbus TCP, OPC UA	
APIs (overalls and time waveforms)	MQTT, Websockets, REST	
	CONNECTIVITY	
Wired Network	Two 100M/10M Ethernet ports RJ45 (for OT and IT Network)	
Wireless Network	WiFi 802.11 a/b/g/n	
Wireless Security	WPA-2/WPA-3 (<i>PSK</i>) and WPA Enterprise (<i>802.1X</i>)	
Antenna connector (for WiFi)	RP-SMA Male connections	
Antenna gain(for WiFi)	2.4Ghz Antenna 3dBi	

DEVICE SPECIFICATIONS		
Power supply	12 V DC/3 A (power supply included, with replaceable IEC C13 cable)	
Dimensions	TBD	
Weight	TBD	
Housing material	Stainless Steel	
Operating temperature	-7 to 60 °C (20 to 140 °F)	
Protection grade	IP54	
Mounting	Standard DIN Rail (35 mm, 42 mm wide)	
SKU	EPH-D8 (for 8 channel) / EPH-D16 (for 16 channel)	