



MASTERS OF MACHINE HEALTH

DEFIANT

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 output sensors, proximity probes, displacement sensors, 4-20mA (with an external adapter), current transformers and any voltage-output sensor (AC and DC).
Voltage input ranges (AC)	$\pm 2.5\text{ V}$, $\pm 5\text{ V}$, $\pm 10\text{ V}$ (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 (<i>vibration, speed, current, etc</i>)
Wireless range	100 m line of sight / 500 m line of sight (<i>long range mode</i>)
Wireless sensor protocol	BLE 5.0
Operating frequency	2.4 Ghz
Transmission Power	+/-8dBm
Antenna connector (<i>for BLE</i>)	RP-SMA Male connections
Antenna Gain (<i>for BLE</i>)	2.4Ghz Antenna 3dBi

SOFTWARE SUPPORT

Analysis Software	Built-in, also compatible with DigivibeMX And WiSER Vibe
Cloud service support	EI Analytic (<i>eianalytic.com</i>) for cloud vibration monitoring, analysis and alarm notifications
Industrial protocols (<i>overalls only</i>)	Modbus TCP, OPC UA
APIs (<i>overalls and time waveforms</i>)	MQTT, Websockets, REST

CONNECTIVITY

Wired Network	Two 100M/10M Ethernet ports RJ45 (<i>for OT and IT Network</i>)
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 (<i>for WiFi</i>)	RP-SMA Male connections
Antenna gain(<i>for WiFi</i>)	2.4GHz Antenna 3dBi

DEVICE SPECIFICATIONS

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