



MASTERS OF MACHINE HEALTH

# DEFIANT

REAL-TIME ONLINE PROTECTION AND MONITORING SYSTEM

[www.erbessd-intruments.com](http://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)	$\pm 2.5$ V, $\pm 5$ V, $\pm 10$ V, $\pm 20$ 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	12VDC/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> )