CAVU

CONDITION MONITORING

VOM-1010

Gone are the days of tedious manual monitoring. CAVU Aerospace introduces the VOM-1010, a next-generation remote condition monitoring system designed to revolutionize your asset management strategy.

The VOM-1010 goes beyond basic data collection, offering advanced analytics and real-time insights, empowering you to proactively address potential equipment issues and optimize operational efficiency.

Eliminate the need for constant on-site presence and gain complete control over your assets, with the VOM-1010 seamlessly collecting and transmitting data to servers for comprehensive analysis and visualization.

Additionally, the VOM-1010 features built-in long-term data storage, ensuring critical information is safely retained even in the event of communication failures. This ensures data integrity and empowers informed decision-making even in challenging situations.

CAVU-VOM-1010-Br-v2024.1

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Input Channels	8 Analog Simultaneous Sampling Inputs, 2 Configurable as Tacho 1MΩ Input Impedance
Isolation	UL 1577: 1000 V rms for 1 minute
Sensor Type	ICP Sensors, Tacho-Optical, Proximity Switches, Key Phasor
Sensor Power	24V, 4mA, ON/OFF Via Software, LED Indication
Frequency Range	Fmin: 2Hz Fmax: 50KHz (200K Capable)
ADC Resolution	16 bit Sampling Up to 200K
Number of Samples	Up to 32000 point, Selectable Via Software
FFT	Up to 25600 Lines, HAMMING, HANNING, FLATTOP, RECTANGULAR
Waveforms	Time Domain & Frequency Spectrum of Acceleration, Velocity, Displacement Orbits
Scalar Measurements	RMS, Mean, Peak, Peak to Peak, Crest, Kurtosis
Threshold Per Scalar Parameters	1 Alarm & 1 Trip Per Channel
Frequency Bands Per Channel	16 Alarms & 16 Trips
LED Indicator	Sensor Power, Tacho Power, Network OK, System OK, ADC Card OK
Measurement Period	10 Seconds Up-To User Defined
Measurement Send Period to Server	15 Seconds Up-To User Defined
Database	SQL, CSV File
User Interface Software	Portable JAVA executable + .NET application
Communication	10/100 TCP/IP, USB Serial, RS-422, Wi-Fi, Bluetooth Serial
Onboard Storage	8GByte
Removable Storage 1	Up to 32GByte micro SD-Card
Removable Storage 2	Up to 2TByte 2.5” SSD
Display Option	7 inch colorful TFT 1500 nits Super Bright Direct Sun Readable LCD + Resistive Touch
Operating Temperature	-40 To +85 Celsius (Without LCD) -30 To +70 Celsius (LCD)
Dimensions	190x150x45mm
Weight	Approx. 750 g
Input Power	12VDC 2A
Battery (Optional)	26Wh Li-ion, (Up to 24 Hours of Continuous work without LCD)

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VOM-1010 Software features

Time Waves

Scalar Trends

Orbital Analysis

Alarm&Trip Configuration

Spectrum Analysis

Detailed Inspection

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Discover the Exceptional Features of the VOM-1010 Device

- **Seamless Connectivity:**

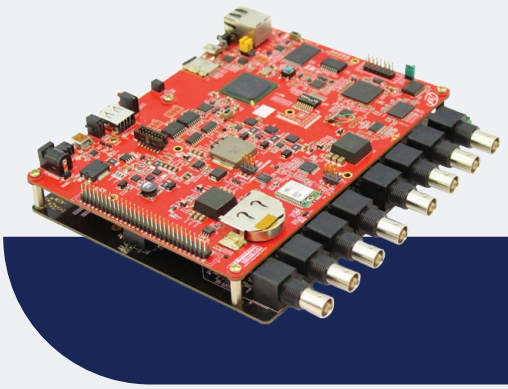
  Direct connection to local networks and the internet for efficient data transmission to designated databases.

- **Scalability:**

  Flexibility to utilize a user-defined quantity of devices within the network, with the capability to expand the number of inputs as needed.

- **Localized Monitoring:**

  Display of measured values and status indicators locally, distinguishing between Normal, Alarm, and Trip conditions.



- **Signal Integration:**

  Integration capabilities for acceleration signals, facilitating the calculation of speed and displacement signals.

- **Statistical Analysis:**

  Computation of statistical parameters across a maximum of 16 frequency bands for each channel.

- **Adaptive Functionality:**

  Adaptive functionality allowing for the disconnection or connection of power to outputs, ensuring compatibility with various sensor types.

- **Stable Power Supply:**

  Provision of controlled current for accelerometer sensors, guaranteeing stable power supply.

- **Power Backup:**

  Autonomous operation through an internal battery in the event of power disruptions.

- **Historical Trends:**

  Trend history display showcasing rms, Peak, and Peak-Peak vibration parameters in user-defined frequency bands.

- **Rotor Synchronization:**

  Simultaneous presentation of amplitude and phase information for rotor synchronous (1xRPM) vibrations and their respective harmonics

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