

Spectral Vibration Data Logger Part of the NOMAD® Family

OM-CP-SVR101



- ✓ Records Vibration Frequencies, Peak Acceleration
- ✓ Detect Mechanical Resonances
- ✓ User Settable Trigger Levels
- ✓ High Speed Download
- ✓ Built-in Accelerometers
- ✓ Programmable Start Time

The OM-CP-SVR101 is a self-contained data logger engineered to record accelerations for spectral analysis of vibration and peaks.

This device is ideal for many applications including endurance testing, machinery failure detection, and vehicle vibration monitoring.

This device records and time-tags 3-axis vibrations and peaks to provide a history of shock/vibration conditions. The device measures and computes real-time spectral data using an FFT (Fast Fourier Transform) from 0 to 128 Hertz. To make efficient use of memory, the OM-CP-SVR101 only takes data when the (user preset) trigger level is exceeded. The minimum sampling rate is 2 seconds and the device can display peak X, Y, and Z shock data, vector sum for data evaluated, up to 4 hours. Data is stored in non-volatile solid state memory.

The OM-CP-SVR101 and the OM-CP Series Data Recorder Software makes data retrieval quick and easy. Simply connect the OM-CP-SVR101 to an empty COM port on the PC (via the OM-CP-IFC110 interface cable). Once offloaded to a PC, the information can be graphed, analyzed and presented using the OM-CP Series software or easily exported to a 3-D graph in Excel.

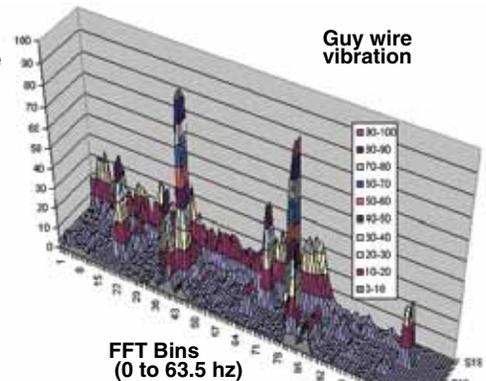
Specifications

Acceleration Sensor: MEMS Semiconductor
Acceleration Range: ±50 g
Acceleration Resolution: 0.05 g
Calibrated Accuracy: ±1 g
Sampling Rate: 256 Hz (decimated to 128 Hz)
FFT Range: 0 to 128 (1 Hz bins)
FFT Window Period: 2 seconds

OM-CP-SVR101 data logger shown smaller than actual size



XYZ Magnitude



Guy wire vibration

FFT Sample Period: 2 seconds to 14,400 seconds (4 hrs)
Memory: 16 Mbit (3,971 samples)
Reading Rate: 2 secs up to 4 hrs
Start Modes: Software programmable immediate start or delay start up to 7 days in advance
Real Time Recording: May be used with PC to monitor and record instantaneous acceleration in real time
Calibration: Digital calibration through software
Calibration Date: Automatically recorded within device
Battery Type: 9V battery user replaceable (included)
Battery Life: 60 hours typical with 9V lithium battery
Power Consumption: 25 mA (average) recording, <40 µA idle @ 25°C
Data Format: Time stamped frequency bins, peak acceleration, average and peak vector sum, temperature
Time Accuracy: ±1 minute/month (at 20°C, RS232 port not in use)

The Windows-based software package allows the user to effortlessly collect, display and analyze data.

Computer Interface: PC serial or USB, 115,200 baud
Software: XP SP3/Vista/7 and 8 (32- and 64-bit)
Operating Environment: -20 to 60°C, (-4 to 140°F)
 0 to 95% RH non-condensing
Dimensions: 26 x 89 x 112 mm (1.0 x 3.5 x 4.4")
Weight: 12 oz (340 g)
Materials: Anodized Aluminum

To Order

Model No.	Description
OM-CP-SVR101	Spectral vibration data logger
OM-CP-IFC200	Windows software and 1.8 m (6') USB interface cable
OM-CP-BAT103	Replacement 9V lithium battery

Comes complete with 9V lithium battery.

Operator's manual, and USB interface cable are included with the OM-CP-IFC200 Windows software (required to operate the data logger and sold separately).

Ordering Example: OM-CP-SVR101 spectral vibration data logger and OM-CP-IFC200 Windows software with USB interface cable.