

OrbiVib Std

- Profibus DP interface
- 2 Digital inputs with encoder function
- 2 Relay outputs
- 8 PT100 temperature inputs
- External Dual axis accelerometer
- DIN-rail snap-on mounting
- Programmable configuration
- Stand Alone security loop functionality
- Internal non-volatile vibration log data buffer



OrbiVib standard DP slave module is designed to measure and supervise 8 low frequency vibration bands by a dual axis accelerometer. All bands are individually programmable for vibration excess and reaction time. One additional band (1 to 100 Hz) is available for individual vibration measurement. The 2-axis inclinometer indicates the x/y deviation from horizontal position.

8 PT100 temperature inputs with 2 individual programmable parameters for temperature excess. 2 digital inputs are individually programmable for RPM measurement or Encoder indication. 2 relay outputs are individually programmable for activation of RPM or/and Vibration excess. 20 sets of internal log data of vibration excesses are stored in a non-volatile memory. The Profibus DP slave interface is used for process monitoring and control, configuration and diagnostics. A GSD[E] file provides the master with all needed information about the module and the data protocol.

OrbiVib Std

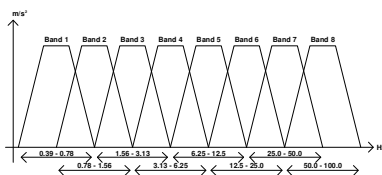
Vibration and RPM guard

Monitoring vibration bands, temperatures and counter / timer signals
Configurable as Stand Alone system.

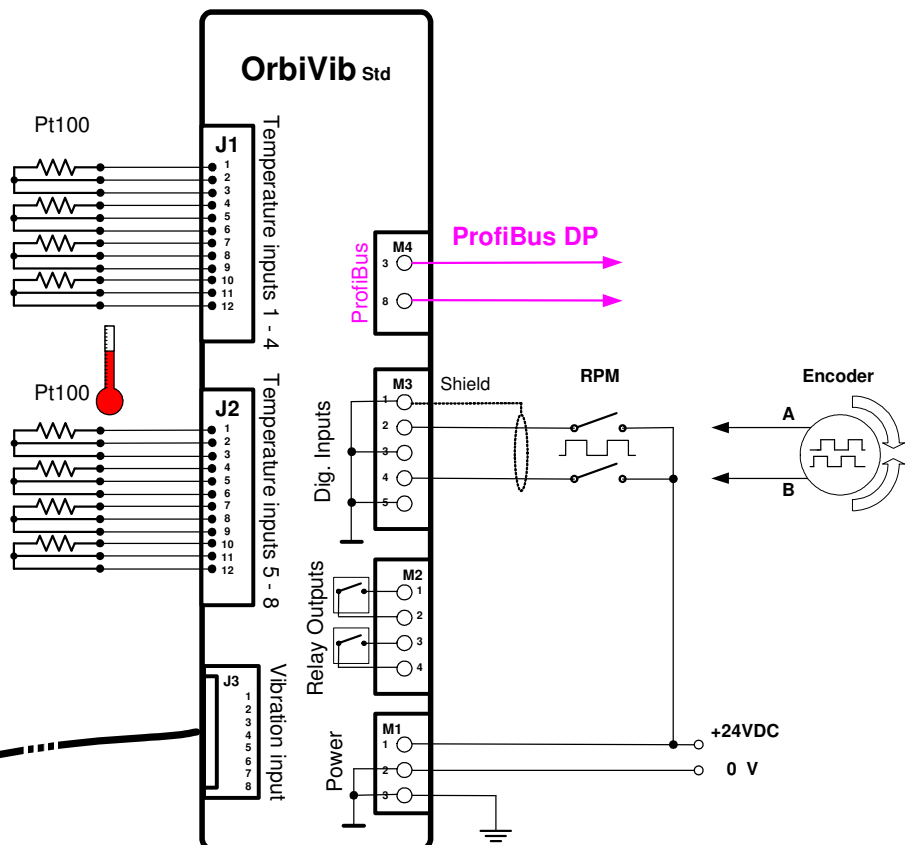
- 1 External dual axis accelerometer
- 8 Pt100 sensors, (3-wired)
- 2 Digital Inputs (encoder / timer).
- 2 Relay outputs.

Measurement:

- 8 fixed LF vibration bands [Hz]
- 1 programmable vibration band [Hz]
- Temperatures [C/F]
- Revolution [RPM]
- CW/CCW indication
- Excess indication of measured values



Vibration Sensor





OrbiVib lite

- Profibus DP interface
- 2 Digital inputs with encoder function
- 2 Relay outputs
- External Dual axis accelerometer
- DIN-rail snap-on mounting
- Programmable configuration
- Stand Alone security loop functionality
- Internal non-volatile vibration log data buffer



OrbiVib lite DP slave module is designed to measure and supervise 8 low frequency vibration bands by a dual axis accelerometer. All bands are individually programmable for vibration excess and reaction time.

One additional band is available for individual vibration measurement. (1 to 100 Hz)

The 2-axis inclinometer indicates the x/y deviation from horizontal position.

2 digital inputs are individually programmable for RPM measurement or Encoder indication.

2 relay outputs are individually programmable for activation of RPM or/and Vibration excess.

20 sets of internal log data of vibration excesses are stored in a non-volatile memory.

The Profibus DP slave interface is used for process monitoring and control, configuration and diagnostics. A GSD[E] file provides the master with all needed information about the module and the data protocol.

OrbiVib_lite

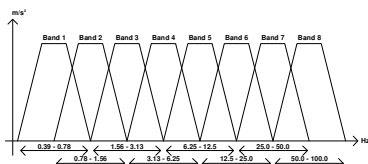
Vibration and RPM guard

Monitoring of vibration bands, and counter / timer signals
Configurable as Stand Alone system.

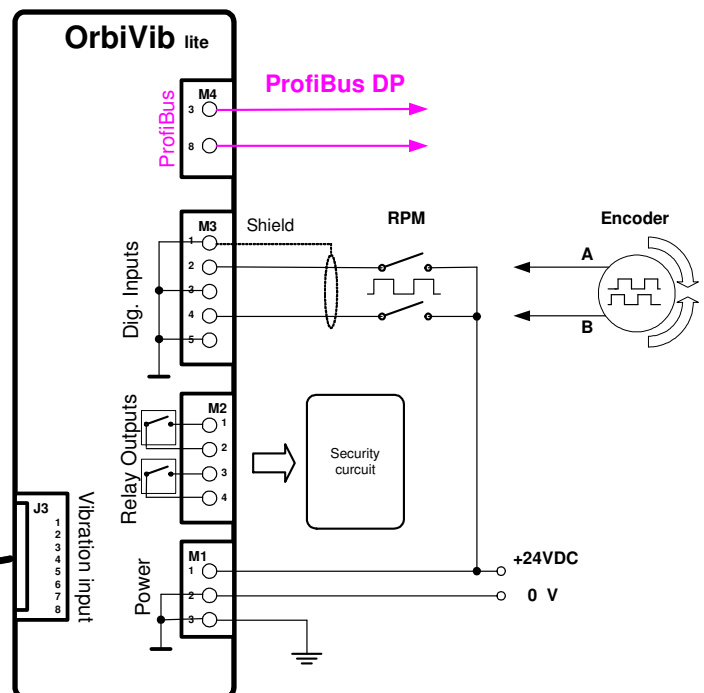
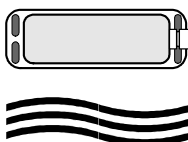
- 1 External dual axis accelerometer
- 2 Digital Inputs (revolutions / encoder).
- 2 Relay outputs.

Measurement:

- 8 fixed LF vibration bands [Hz]
- 1 programmable vibration band [Hz]
- Revolution [RPM]
- CW/CCW indication
- Excess indication of measured values



Vibration Sensor





OrbiVib 232

- RS232 Interface / Modbus protocol
- 2 Digital inputs with RPM / Encoder function
- 2 Relay outputs
- External Dual axis accelerometer
- DIN-rail snap-on mounting
- Programmable configuration
- Stand Alone security loop functionality
- Internal non-volatile vibration log data buffer



OrbiVib 232 module is designed to measure and supervise 8 low frequency vibration bands by a dual axis accelerometer. All bands are individually programmable for vibration excess and reaction time.

One additional band is available for individual vibration measurement. (1 to 100 Hz)

The 2-axis inclinometer indicates the x/y deviation from horizontal position.

2 digital inputs are individually programmable for RPM measurement or Encoder indication.

2 relay outputs are individually programmable for activating a security circuit on RPM or/and Vibration excesses.

50 sets of internal log data of vibration excesses are stored in a non-volatile memory.

The RS232 interface supports Modbus protocol and is used for process monitoring, control and configuration.

OrbiVib 232

Vibration and RPM guard

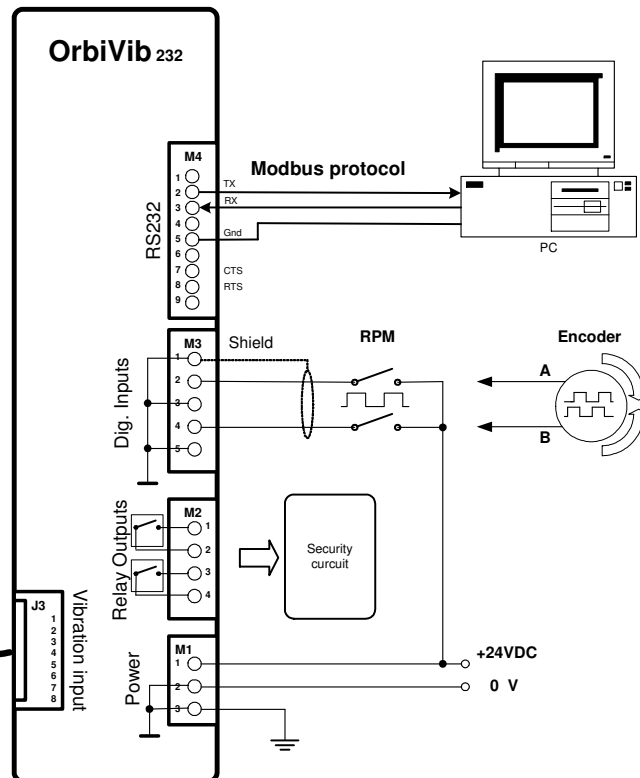
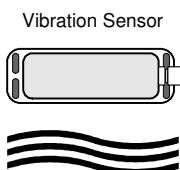
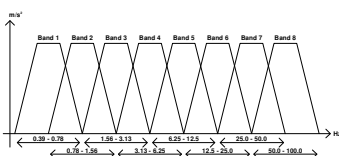
Monitoring of vibration bands, and counter / timer signals

- Stand Alone system -

- 1 External dual axis accelerometer
- 2 Digital Inputs (revolutions / encoder).
- 2 Relay outputs.

Measurement:

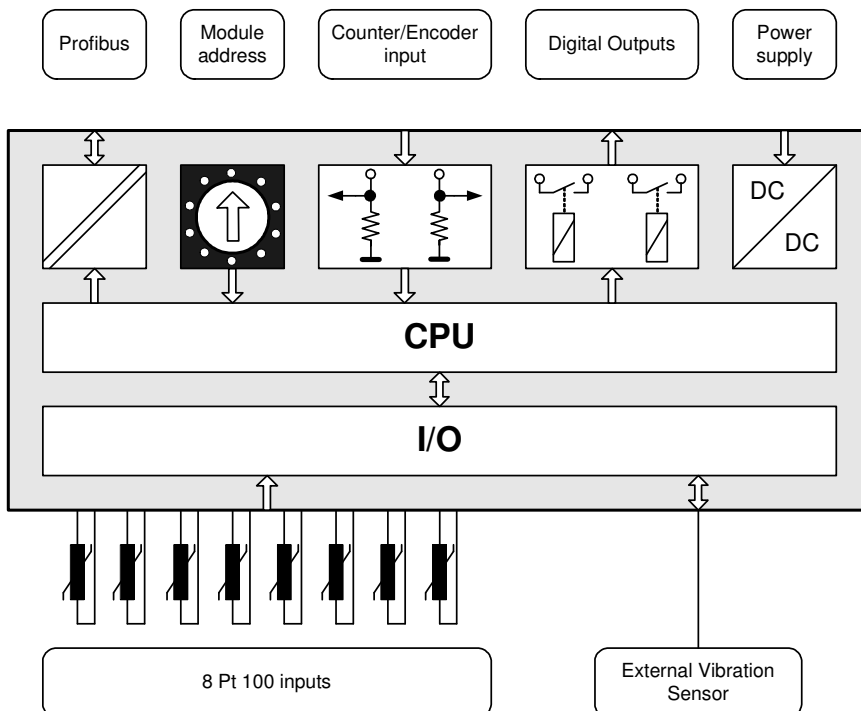
- 8 fixed LF vibration bands [Hz]
- 1 programmable vibration band [Hz]
- Revolution [RPM]
- CW/CCW indication
- Excess indication of measured values



Electrical specifications

OrbiVib std

Parameter	Conditions	Min.	Typ.	Max.	Units
Power supply					
Supply voltage		19,0	24,0	30,0	Vdc
Power consumption	24,0 Vdc \pm 10% supply voltage			10,0	W
Relay outputs					
Switching voltage	Resistive load ($\cos\phi = 1$)			380 / 125	Vac / Vdc
Switching current				5 / 5	Aac / Adc
Switching capacity				1250 / 150	VA / W
Scan cycle			100		msec
Digital / Counter inputs					
Input impedance			4400		Ω
Input voltage	Continuous		24,0	\pm 60,0	V
Low level input				8,0	V
High level input		16,0			V
Input frequency	Duty cycle 50%			50,0	Hz
Profibus					
Baud rate		9600		12M	Baud
Pt 100 inputs					
Range		-50 / -58		200 / 392	$^{\circ}\text{C}$ / $^{\circ}\text{F}$
Linearity error				\pm 0,1	$^{\circ}\text{C}$
Accuracy		0,3			$^{\circ}\text{C}$
Sensor connections					
Output supply voltage		10,0	14,0	24,0	Vdc
Output supply current			75,0		mA
Accelerometer					
Cable length	Sensor to module			20	m
Peak range 0° / 90° level	X and/or Y axis 0° / 90° to earth	10,0 / 4,0	15,0 / 6,0		m/s^2



Mechanical dimensions:



150 mm



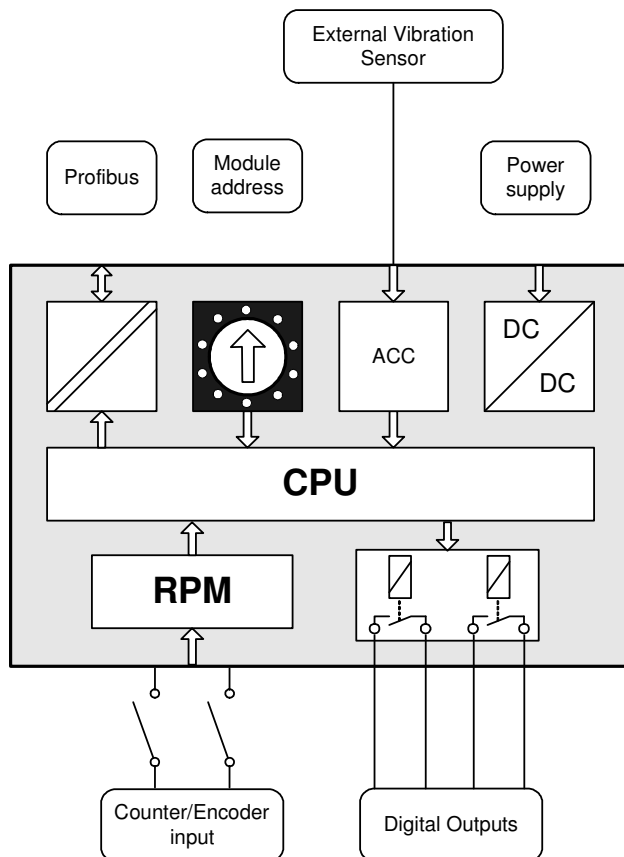
110 mm

75 mm

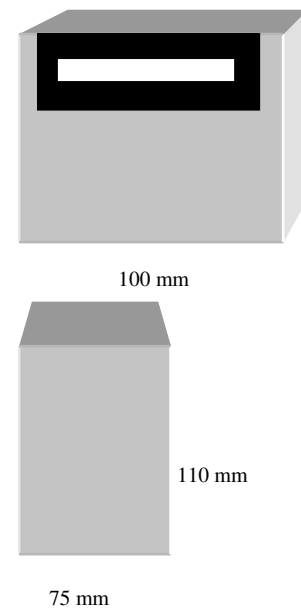
Electrical specifications

OrbiVib lite

Parameter	Conditions	Min.	Typ.	Max.	Units
Power supply					
Supply voltage		19,0	24,0	30,0	Vdc
Power consumption	24,0 Vdc \pm 10% supply voltage			10,0	W
Relay outputs					
Switching voltage	Resistive load ($\cos\phi = 1$)			380 / 125	Vac / Vdc
Switching current				5 / 5	Aac / Adc
Switching capacity				1250 / 150	VA / W
Scan cycle			100		msec
Digital / Counter inputs					
Input impedance			4400		Ω
Input voltage	Continuous		24,0	\pm 60,0	V
Low level input				8,0	V
High level input		16,0			V
Input frequency	Duty cycle 50%			50,0	Hz
Profibus					
Baud rate		9600		12M	Baud
Sensor connections					
Output supply voltage		10,0	14,0	24,0	Vdc
Output supply current			75,0		mA
Sensor Cable length				20	m
Peak range 0° / 90° level	X and/or Y axis 0°/90° to earth	10,0 / 4,0	15,0 / 6,0		m/s ²



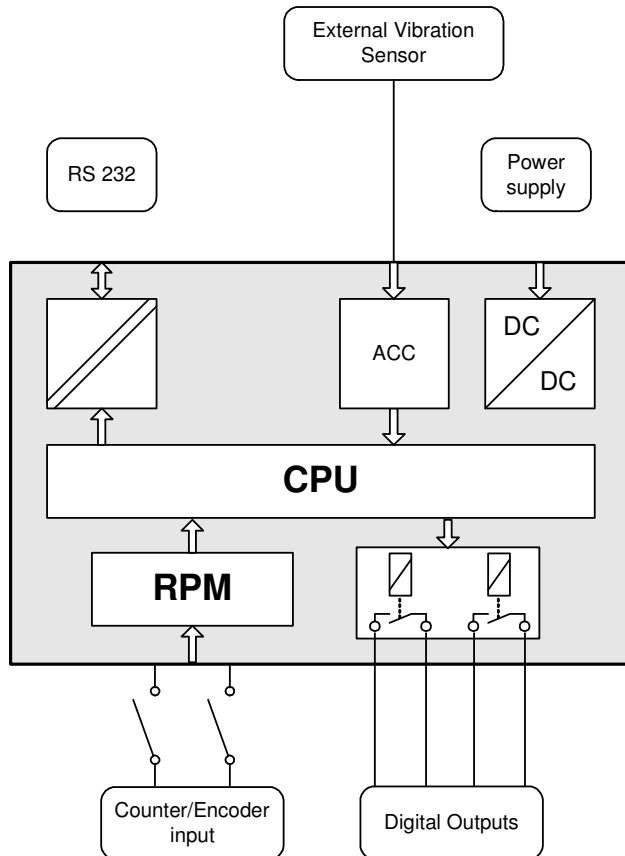
Mechanical dimensions:



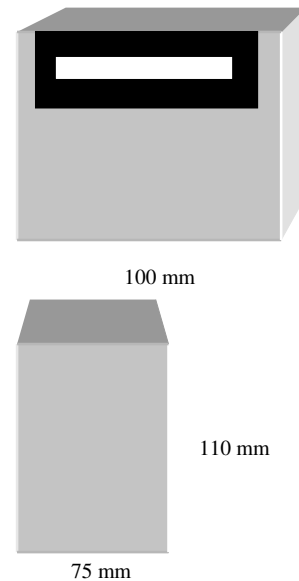
Electrical specifications

OrbiVib 232

Parameter	Conditions	Min.	Typ.	Max.	Units
Power supply					
Supply voltage		19,0	24,0	30,0	Vdc
Power consumption	24,0 Vdc \pm 10% supply voltage			8,0	W
Relay outputs					
Switching voltage	Resistive load ($\cos\phi = 1$)			380 / 125	Vac / Vdc
Switching current				5 / 5	Aac / Adc
Switching capacity				1250 / 150	VA / W
Digital Inputs					
Input impedance			4400		Ω
Input voltage	Continuous		24,0	\pm 60,0	V
Low level input				8,0	V
High level input		16,0			V
Frequency	Duty cycle 50%			50,0	Hz
RS232	Communication speed		9600		Baud
Accelerometer	Cable length / sensor to module			20	m
Peak range 0° / 90° level	X and/or Y axis 0° / 90° to earth	10,0 / 4,0	15,0 / 6,0		m/s ²



Mechanical dimensions:



General specifications for all units:

Electromagnetic compatibility:	EN 50 081-2 EN 50 082-2	Generic emission standard Generic immunity standard	Industrial environment Industrial environment
Mounting:	Snap-on DIN rail adapter TS 35 2 Hole mounting		EN 50 022 DIN 46 121 / DIN 43 660
Operating temperature:		-20 – 50 °C	
Storage temperature:		-40 – 85 °C	
Environment:		IP20	
Humidity:		0 – 95% RHD non condensing	