
Decaport Analogue Interface Module

Each Decaport Analogue Interface Module has 30 input channels, so allows connection of up to 10 three-axis sensors to the PXI Data Acquisition Unit.

The Decaport is primarily intended to support Bartington Instruments' magnetic field sensors, but incorporates programmable features to support a wide range of sensor types (e.g. depth, pressure, E-Field). It is software-configurable for single-ended or differential analogue sensor inputs, anti-aliasing filters, frequency response and sensor supply voltage.

The Decaport also provides power when used with the Bartington Instruments range of sensors.



Features

- Single-ended analogue output to PXI Unit
- Monitoring of the sensor power supply voltage, current and electrical leakage
- Activates magnetometer test function (when available on magnetometer)
- Comprehensive ESD surge protection on the sensor input
- Standard 19-inch rack-mounting
- Operates with sensor cables up to 1km long (sensor dependent)

Decaport Specifications

Performance	
Number of input channels	10 three-axis magnetic field sensors
Working signal input voltage	±10V differential or single-ended
Working common mode input voltage	±8V: balanced / differential output sensors ±3V: single ended sensors
Absolute maximum input voltage	±15V on any input pin
Sensor power output	±12V or ±14V limited to 50mA per sensor channel Sensor power supply voltage, current and electrical leakage monitoring Power output protected by self resetting semiconductor fuses
ESD protection	Comprehensive ESD surge protection on the sensor input
Filter	Type Butterworth 2-pole 12dB per octave low pass Frequencies (software selectable): 10kHz, 1kHz, 100Hz, 10Hz
Maximum cable length (recommended)	1km
Power supply voltage	85 to 264 VAC 50/60Hz automatic selection
Power supply current	1100mA (115V) / 640mA (240V) typical
Analogue outputs	Balanced ±10V each leg
AFPI Inputs	5V TTL Logic compatible

Environmental	
Operating temperature range	-20°C to +70°C
Relative humidity	0 to 90% non-condensing

Mechanical	
Dimensions	Standard 19-inch rack-mounting 1U (482 x 44 x 254mm)
Weight	3kg
Input connector (front panel)	Hirose RM15TRD-10P
Sensor mating connector	Hirose RM15TPD-10S
Output connector (rear panel)	68-way Harting 6001 068 5232
Power input (rear panel)	3-way IEC with integral filter (mains cable provided)
Auxiliary connector (rear panel)	15 way D type