

# KRYPTON® WATERPROOF



## UP TO 100 m BETWEEN UNITS

KRYPTON units can be distributed over the large area with distances of up to 100 meters (328 feet) between DAQ nodes.

## DISTRIBUTED DAQ

Distributed measurement hardware that can be located close to sensors. Compared to traditional DAQ systems, this has many advantages such as shorter cable runs and less potential for signal noise. KRYPTON systems can be distributed down to a single channel.

## EtherCAT® DAQ

Protocol with 100Mb/s bus speed is used for data transmission, data synchronization, and power supply. KRYPTONs are connected with a single cable for data, power, and sync.

## RUGGED IP67

These modules are built with tough-as-nails IP67 protection - they're ready to go to work in extreme weather and under the harshest conditions.

Rugged and distributable data acquisition modules. EtherCAT® interface for analog and digital I/O and IP67 degree of protection.

## UP TO 20 kS/sec/CH SAMPLING RATE

Most KRYPTON channels in the EtherCAT® line can achieve sampling rates up to 20 kS/second.

## FROM 3 TO 16 CHANNEL UNITS

Modules are available from a 3 channel unit, ranging up to larger 8 and 16 channel modules.

# KRYPTON® WATERPROOF SPECS

	STG	TH	RTD	ACC	LV	LA	DIO
Connectors	DB9, L2B10f	Thermocouple	L0B6f	BNC	BNC	BNC	DB25
#ch per module	3x, 6x	8x, 16x	8x	4x, 8x	4x, 8x	8x	16xDI, 16xDO 8xDI, 8xDO
Data rate / channel	20 kS/sec	100 S/sec	100 S/sec	20 kS/sec	20 kS/sec	20 kS/sec	20 kS/sec
Resolution	24 bit	24 bit	24 bit	24 bit	24 bit		digital
Bandwidth	0.49 fs	-	-	0.49 fs	0.49 fs	0.49 fs	-
Voltage ranges	±10V, ±1V, ±100mV, ±10mV	±1V, ±100mV	±1V, ±100mV	±10V, ±5V, ±1V, ±200mV	±50 V	±20 mA	CMOS compatible
Input coupling	DC	DC	DC	DC, AC 0.1Hz, 1Hz	DC	DC	DC
Sensor excitation	0...15 V max. 0.4W/ch (45mA limit)	-	-	IEPE 4 mA, 8 mA	-	-	5 V / 300 mA 12 V / 120 mA Vsupply / 200 mA
Bridge connection	Full, ½, ¼ 350Ω, ¼ 120Ω 3 wire	-	-	-	-	-	-
Programmable shunt	100 kΩ	-	-	-	-	-	-
IEPE input	DSI-ACC	-	-	✓	-	-	-
Resistance	-	-	10kΩ	-	-	-	-
Temperature (PTx)	DSI-RTD	-	PT100, 200, 500, 1000, 2000	-	-	-	-
Thermocouple	DSI-TH	K, J, T, R, S, N, E, C, B	-	-	-	-	-
Potentiometer	✓	-	-	-	-	-	-
LVDT	DSI-LVDT	-	-	-	-	-	-
Charge	DSI-CHG	-	-	-	-	-	-
Current	ext. shunt DSI20mA, DSI5A	-	-	ext. shunt	-	-	-
TEDS	✓	-	-	✓	-	-	-
Isolation voltage	Differential	1000 V	1000 V	Differential	1000 V	1000 V	250 V
Power consumption per module	2.4W (4W 120Ω @ 5V load) 3xSTG; 5.9W (8.9W 120Ω @ 5V load) 6xSTG	2.5 W (8xTH) 4 W (16xTH)	2.5 W	4.6 W	3.5 W (4xLV) 6.7W (8xLV)	6.8W	2 W
Advanced functions	Supports all strain types, TEDS support	High isolation, support of main TC types	High isolation	TEDS support	High isolation, high input range	High isolation, 4-20 mA current loop	-

## AMPLIFIER SPECS

3xSTG, 6xSTG	Differential universal and strain module
8xTH, 16xTH	Isolated universal thermocouples module
8xRTD	Isolated module for measurements with resistance temperature detectors
4xACC, 8xACC	IEPE accelerometer amplifier
4xLV, 8xLV	Isolated voltage input module

8xLA	Isolated low current amplifier
16xDI, 16xDO, 8xDI-8xDO	Isolated digital input/output module
GPS JUNCTION	Module for synchronization between SIRIUS or KRYPTON EtherCAT® devices to SIRIUS USB device, IRIG-B-DC or GPS
Sync junction	Module used to inject IRIG-B-DC sync signal from USB device to EtherCAT® line
KRYPTON CPU	Rugged data logger