

SIGNAL CONDITIONER

DESIGNED FOR THE MOST DEMANDING APPLICATIONS REQUIRING SYNCHRONISED HIGH SPEED MEASUREMENT

KEY FEATURES

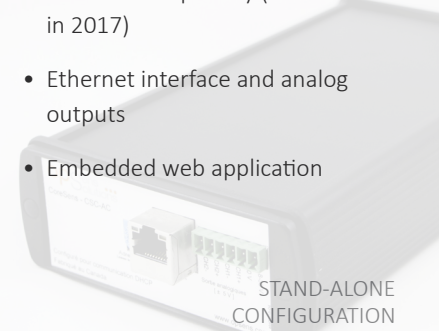
- 2 channels per module
- Available in Rackmount or Stand-alone configuration
- High linearity, precision and resolution
- Stackable for a larger quantity of measuring channels
- EtherCAT® capability (available in 2017)
- Ethernet interface and analog outputs
- Embedded web application



RACKMOUNT CONFIGURATION



Two channels per module



STAND-ALONE CONFIGURATION

CORESENS

Compatible with Opsens Solutions' WLPI fiber optic sensors: pressure, temperature, strain, displacement

DESCRIPTION

The CoreSens is a versatile, scalable system that includes a control unit, modular signal conditioner unit (WLX-2 modules) supporting a **variety of fiber optic sensors**. Each WLX-2 modules have **two channels** to optimized number of sensors per chassis.

The CoreSens is designed for the most demanding applications requiring synchronised **high speed measurement**.

At the heart of the CoreSens is the Opsens Solutions' White Light Polarization Interferometry (WLPI) technology (Patent #7,259,862) which provides a means for making **accurate and reliable measurements** of physical parameters such as **temperature, strain, pressure and displacement**.

Through its EtherCAT® capability (available in 2017), the system offers a larger quantity of measuring channels working simultaneously at speed up to 1 kHz. The CoreSens unit chassis can be easily stackable for applications involving hundreds of measuring points.

In its chassis configuration, an embedded web application allows **control** of the CoreSens. The Rackmount module also offers a SDHC memory capabilities to store data locally.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

APPLICATIONS

- ✓ Simultaneous measurements of temperature, pressure, strain and displacement
- ✓ Synchronized monitoring for multiple measuring points
- ✓ Military and aerospace applications
- ✓ Dynamic surveillance of civil engineering and geotechnical infrastructures
- ✓ Structural health monitoring

opSens Solutions

Enlightenment through smart measurements

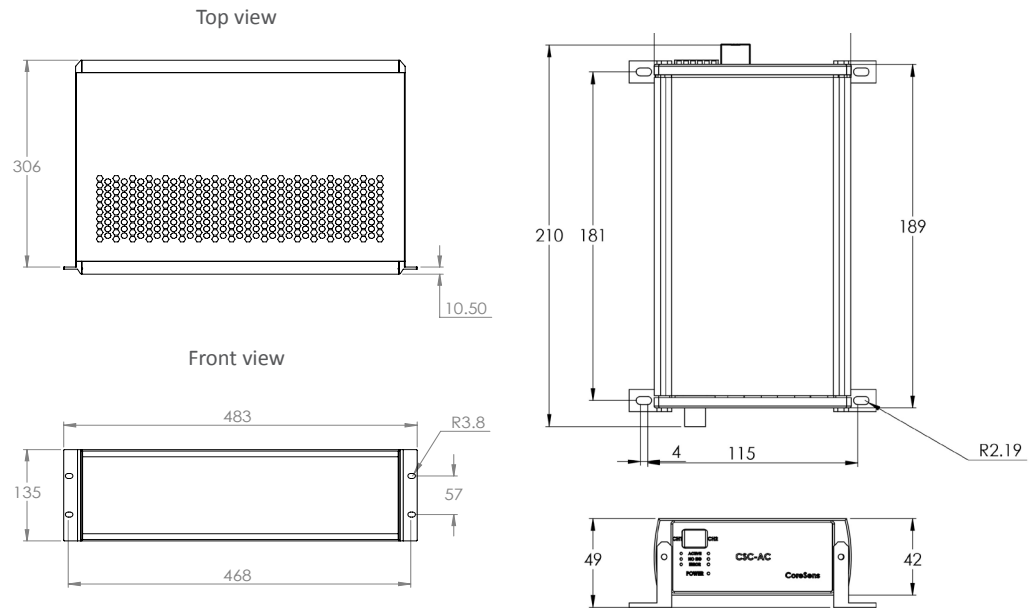
CORESENS

SIGNAL CONDITIONER

SPECIFICATIONS

CONFIGURATION	RACKMOUNT	STAND-ALONE
---------------	-----------	-------------

MECHANICAL DRAWINGS (in mm)



NUMBER OF CHANNEL	26 channels 13 WLX-2 modules with 2 channels per module	2 channels
SAMPLING RATE	WLX-2 modules (500 Hz) WLX-2S (1 kHz available in 2017)	WLX-2 modules (500 Hz) WLX-2S (1 kHz available in 2017)
I/O INTERFACES	Ethernet 10/100 Base-T interface, EtherCAT® capability (available in 2017)	Ethernet 10/100 Base-T interface
ANALOG OUTPUTS RANGE	0-5 V, ±5 V, 0-10 V, 0-20mA, 4-20 mA	0-5 V, ±5 V, 0-10 V, 0-20mA, 4-20 mA
INPUT POWER	90 to 260 VAC	8 to 32 VDC
DIMENSION	19" Rack Mount, 3U	210mm x 115mm x 42mm
WEIGHT	Full: 9.4 Kg (0.35 Kg per WLX-2 module)	0.68 Kg
POWER CONSUMPTION	Full: 70W (5W per WLX-2 module)	5W
STORAGE TEMPERATURES	- 30°C to 65°C	- 30°C to 65°C
OPERATING TEMPERATURES	0°C to 45 °C	0°C to 45 °C
HUMIDITY	95% non condensing	95% non condensing
WEB APPLICATION	Yes	NA
LOCAL DATA STORAGE	SDHC (32Gb)	NA