Datalog X- PRO

Intelligent device for field and remote monitoring

Description

Designed for remote or field monitoring in multiple fields, such as Cold Chains, Tracking, Agriculture, or Smart Cities; thanks to its ports for up to three sensors. Comes with WEB platform support.

Features

- Ports for three sensors.
- Wi-Fi®, Sigfox wireless transmission modules.
- Rechargeable Li-Ion Battery.

Visualization

Web/App interface for visualization of:

- Current sensed measures.
- Alarm limits configuration, among other parameters.
- Graphic record of each variable for up to 2 years.

Works with/without an attached screen.

Alarms

- Remotely displays alarms on WEB or mobile application.
- External alarms by SMS, e-mail and Telegram messaging service.

Ordering Information

PRO061801	Datalog X PRO main unit with in-built Accelerometer.
PRO061801 -Sigfox	Module for Sigfox, RC2 902 – 905Mhz / RC4 920 -923Mhz, 22dBm ERP transmission.
PRO061801 -INT01	Sensor Interface for Analog or Digital external sensor.

Contact Information

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POWER REQUIREMENTS

Parameter	Standard	Value	Units
Power Adapter	Screw 5.08 mm terminals	--	--
Max. Electric Current	--	0.5	A
DC Voltage	--	6 to 24	V
Battery Ratings			
Type	LiPoly		
Electric Current	--	2200	mAh
Nominal Voltage	--	3.7	V

RECOMMENDED OPERATING CONDITIONS

Operating Conditions	Value	Units
Storage Temperature	50 (20) – 113 (45)	°F (°C)
Storage Humidity	Up to 100	% R.H./Non-Condensable
Ambient Temperature	32 (0) – 113 (45)	°F (°C)
Ambient Humidity	Up to 100	% R.H./Non-Condensable
Standard	Protection Type	
IEC standard 60529/ EN 60529	**IP67.** No ingress of dust; complete protection against contact (dust tight). No ingress of water when submerged up to a depth of 1 meter for 30 minutes. **Suitable for outdoor use.**	

WIRELESS SPECS

Device Type	Standard	Note
PRO061802-Wi-Fi®	Wi-Fi® (IEEE 802.11) 2.4 GHz. WPA2 encryption.	Stores configuration data for up to 3 networks.
PRO061802-Sigfox	Sigfox, RC2 902 – 905Mhz / RC4 920 -923Mhz, 22dBm ERP	Zone 2 (USA, Mexico) and Zone 4 (Latin America).

SENSOR TYPES SUPPORTED BY DATALOG X PRO

Sensor Interfaces (P/N PRO061801-INT01) for Datalog X PRO can be programmed by the user to receive sensors that communicate through the types of signals listed below. This list should not be taken as invariable; sensors with many other types of communication can be supported as well.

Digital	Analog
I2C	0-10 VDC
Serial (RS232/RS485)	0-5 VDC
SPI	4-20 mA
One-Wire	NTCs
Binary (dry-contact, switches)	Variable resistors
…	Thermocouples
	RTDs
	…

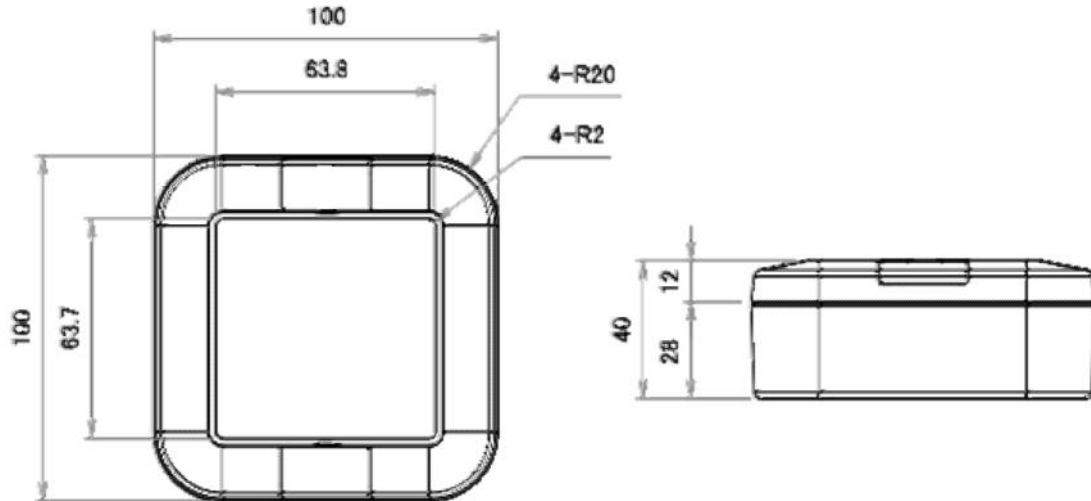**Other sensor types can be ordered, for more information, please contact the manufacturer.**

POSSIBLE APPLICATIONS AND SENSORS FOR DATALOG X PRO

Datalog X PRO is enabled to receive up to 3 sensors. Internally it could have up to 3 user programmable interfaces to receive external digital or analog sensors of the multiple indicated types, which follow the specifications and requirements listed by Datalog X PRO manufacturer (more information on this subject can be found in the Sensors Guide on Datalog X PRO User Manual). Below are presented possible applications for some groups of sensors that the device can be set to receive.

Purpose	Related Sensors
Measurement of environmental variables: in **industrial or agricultural applications,** or projects focused on the **measurement of air quality, particle pollution, or gas presence.**	✓ Particle Matter ✓ Temperature, humidity and pressure ✓ Luminosity ✓ Ultrasound (distance measurement) ✓ Noise level sensor NLS
Security monitoring in private spaces: which require **presence sensors, smoke sensors, or door or window opening sensors.**	✓ Temperature + Humidity + Pressure ✓ Luminosity ✓ Ultrasound (distance measurement)

Purpose	Related Sensors
	✓ Presence - PIR ✓ Relay Input
Geolocation.	✓ GPS
Measurement of variables in early warning systems.	✓ Ultrasound (distance measurement) ✓ Noise level sensor NLS ✓ Gas sensors
Measurement of meteorological variables: in stations that measure **wind speed and direction, rain level, ambient light or solar radiation.**	✓ Temperature + Humidity + Pressure ✓ Luminosity ✓ Ultrasound (distance measurement) ✓ Generic Weather Station ✓ Shortwave radiation ✓ Solar radiation (PAR) ✓ Ultraviolet radiation
Measurement of agricultural variables: in greenhouses, irrigation systems or points in open field where measurement of **soil moisture, soil temperature or soil p.H.** is required.	✓ Conductivity, water content and soil temperature ✓ Soil temperature and volumetric water content ✓ Soil Moisture ✓ Solar Radiation (PAR) ✓ Ultraviolet Radiation ✓ Soil Temperature (PT-1000) ✓ Temperature + Humidity + Pressure ✓ Luminosity ✓ Ultrasound (distance measurement)
Measurement of **optical variables.**	✓ Shortwave radiation ✓ Solar radiation (PAR) ✓ Ultraviolet radiation

DIMENSIONS

Dimensions in mm. Enclosure molded from resistant ASA material. For further information concerning this enclosure, visit: goo.gl/Xapdsw
Weight: 230g, without accessories.

WEB PLATFORM AND SERVICES

3Sense 4.0 devices work in conjunction with WEB platform and APP.

Users can access platform, via WEB or APP, to perform:

✓ Remote monitoring and visualization of Temperature and R. Humidity records, in graphs and data tables, from up to 2 years.
✓ Alarm management for variables out of range, battery levels and AC power fails.
✓ Add comments to records.
✓ Set alarm limits, among other custom settings like sensors' names.
✓ Set alarm events such as e-mail or SMS notifications.