TECHNICAL DOCUMENT

FLUXER
FLOOD CONTROL

Reporter®

Version:	**1.1**	GTIN:	**05430002103112**
Updated:	**31-08-2024**	MPN:	**CRREPPID2100**



About this product

Reporter® is your new favourite solution for professional remote monitoring. This plug & play IoT sensor device has a reliable wireless internet connection using cellular data and lets you connect almost any sensor you need, in any possible combination.

Reporter offers a real-time data link to the cloud, measuring, storing and transmitting sensor data every 30 seconds to every two hours, as configured by the user. Every Reporter is capable of operating 24/7 on grid or solar power using the onboard battery.

The names Crodeon® and Reporter® are registered trademarks of Crodeon Technologies BV.

Specifications

General	
Brand	**Crodeon®**
Environmental protection class	**IP67**
Dimensions	**45 x 187 x 137 mm** (h x w x d)
Weight	**402 gr**
Operational temperature range	**-10°C to +40°C**
Connectivity	**Cellular Network** **4G** (NB-IoT)**, 4G** (Cat-M)**, 2G** (GPRS)
Measurement interval	**Configurable online** (options are 30 sec, 1 min, 2 min, 5 min, 10 min, 15 min, 20 min, 30 min, 1 hour, 2 hours)
Power	
Grid adapter power input	**5 - 22 V at 3 A** (18 - 20 V at 3 A advised)
Solar power input	**Crodeon 10 W solar panel compatible**
Internal battery capacity	**5.200 mAh**
Sensor connection	
Number of ports	**4 universal** (+ 1 power connector)
Number of channels	**16 parameters per connector**
Power supply to the sensors (1)	**6 V** (derived from Reporter internal battery) **140 mA max**
Power supply to the sensors (2)	**15 - 22 V** (derived from Reporter power port) **600 mA max – 1.2 A peak** Make sure the power supply on Reporter's power port is sufficiently strong
Compatible sensor outputs	**Depends on the adapter** (cf. page 3)

Sensor compatibility

Crodeon has designed Reporter to be compatible with as many different sensors as possible. We have re-imagined from scratch the ideal way of linking a sensor to the cloud. The answer that we came up with is explained below.

Reporter communicates with sensors through a proprietary Crodeon protocol using differential signals. Each sensor requires an adapter for signal conversion and to enable automatic sensor detection.

For sensors that are designed by Crodeon, the adapter is built inside the sensor. These sensors, such as our temperature sensor, CO2 sensor and weather sensor are always directly compatible with Reporter.





For third party sensors, the adapter is the sensor connector that is mounted on the sensor cable. The adapter turns the sensor's cable end wires into a female M12 connector. The connector offers IP65 protection and allows the sensor to be automatically detected by your Reporter.


Digital / Analog Input Adapter


UART / I2C Adapter


Modbus / RS-485 Adapter


4-20 mA Adapter


High Precision Adapter

There are five different sensor adapters. Select your adapter based on the output signal of your specific sensor. Visit the Crodeon webshop for more information about each of the adapters.

How to use

Connect up to four sensors to one Reporter. The fifth connector is where you plug the power supply. Sensor cables can be extended up to 30m with standard extension cords.



Visit the Crodeon webshop at www.crodeon.com for a complete overview of all compatible sensors.

Reporter is powered by grid or solar power. During the night or a power outage, the device will keep operating for between 3 and 14 days, depending on the measurement interval and the number of sensors connected.

Crodeon Dashboard

Sensor data is transmitted in real-time to our cloud platform, the Crodeon Dashboard, using Reporter's cellular data connection. As a customer, you can consult live data on the Crodeon Dashboard. Create your free account at cloud.crodeon.com for more information about this cloud-based web application.

Alarm settings and the measurement interval of your Reporter and sensors can be configured on the Crodeon Dashboard.

API Access

The Crodeon Dashboard includes a third-party Rest API that allows you to integrate sensor data into your own platform. Visit crodeon.stoplight.io for more information about the API.