

## **Next Evo**

**Next Evo** by Pietro Fiorentini is the datalogger for the continuous remote monitoring of electrical parameters in cathodic protection systems. It records all key operating values, including  $\rm E_{ON}$  /  $\rm E_{OFF}$  measurement cycles on buried coupon. Next Evo is natively integrated with S2B platform.



**Next Evo** complies with the main international standards ISO 15589-1 and EN 13509, that set out the monitoring principles and measurement techniques of the effectiveness of cathodic protection on buried metallic structures.



Gas compression / booster station



City gates



District stations

Features	Values	
Ambient temperature	from -25°C to +60°C	
Input impedance	>10MOhm (CH1, CH3, CH4, CH5) >1MOhm (CH2)	
Data Logging	<ul> <li>Continuous recording: 86400 points/day</li> <li>Statistical aggregation per minute: MIN, MAX, AVG, ST.D., TFL +/- (Time Fraction Low/High), NAL +/- (Number Above/Below Alarm Limit)</li> <li>Storage duration: 2 years (daily), 25 days (1-second) data retention.</li> </ul>	
Configurable parameters	Transmission interval, thresholds, acquisition sampling times and elaboration	
Integrated cyclic switch	Remotely fully configurable SSR switch	
Channel connection type	Phoenix connector	
Ingress protection	IP54	
Optional accessories	External Power Supply Adapter, Back-up Battery, Power Cables, External Antenna, External Shunts (1,5A, 15A or 30A)	
Local communication	BLE	
Remote communication	Internal modem LTE-M (internal antenna or optional external antenna)	
Digital outputs	<ul> <li>RS-485 (for direct connection with a transformer or a rectifier)</li> <li>1 digital output for general purpose</li> </ul>	
Digital inputs	1 digital input for general purpose	
Battery life <sup>1</sup>	<ul> <li>Main battery: up to 5 years</li> <li>Back-up battery (when powered by external power sources²): up to 60 days</li> </ul>	
External Power Supply <sup>2</sup>	230V AC	
Main dimensions	170x120x80 mm	

Battery life depends on several factors, including ambient temperature, logging frequency, and transmission interval.
 Connection to an external power source requires an optional power supply adapter

Table 1 Technical features of Next Evo



## **Measurement Channels DC/AC**

Channel	Measuring type	Accuracy (Full Scale)
CH1	E <sub>on</sub> / E <sub>coupon</sub> Potential + E <sub>off</sub> cyclic switch	0,006% (±30V)
CH2	Low Voltage or I <sub>out</sub> (through the external shunt)	0,016% (±150mV)
CH3	I <sub>COUPON</sub> (through the internal shunt)	0,012% (±200mA)
CH4	V <sub>out</sub> High voltage	0,008% (±120V)
CH5	E <sub>OFF</sub> cyclic switch	0,006% (±30V)

Table 2 Channel list

## **Approvals**

**Next Evo** is designed in accordance with EN 13509 (Cathodic protection measurement techniques) and follows the requirements of ISO EN 15589-1 (Petroleum, petrochemical and natural gas industries — Cathodic protection of pipeline systems). The device meets the requirements of EN 60529:1991+A1:2000+A2:2013 (Degrees of protection provided by enclosures. IP Code) and IEC 62262:2002 (Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts. IK Code).

Next Evo s is CE marked and complies with 2014/53/UE (RED), 2012/19/EU (WEEE 2), 2014/35/EU (Low Voltage) and 2011/65/UE (RoHS 2).



ISO EN 15589-1



EN 13509



UNI 10950



Low Voltage



WEEE 2



RoHS 2







IP54



IK07

## **Next Evo:** competitive advantages



Easy installation and maintenance



Local communication with BLE



Optional external power supply



Electrical safety design



Extended life battery



Extremely high accuracy



Integrated cyclic switch for configurable and optimized OFF measurements



Enable the remote configuration of transformers and rectifiers



LTE-M network technology



Protection against lightning-induced overvoltage