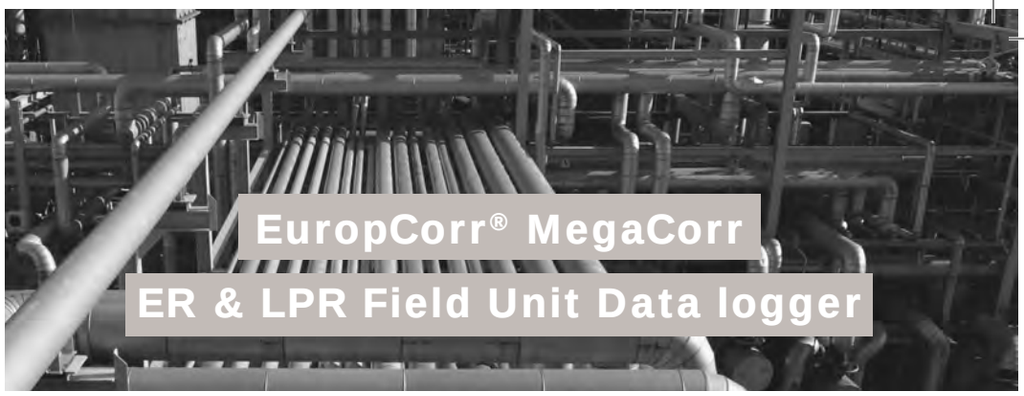

EuropCorr® MegaCorr

ER & LPR Field Unit Data logger

MEGACORR

MEGACORR SINGLE CHANNEL

Field Data logger for continuous measurement of rates by using Electrical Resistance Probes and Linear Polarization Resistance Probes
Suitable for any type of sensing Element:

- Flush Strip (ER), Tubular or Wire Loop probe;
- Two or three electrodes (LPR) probe

General information

The MegaCorr data logger monitors the corrosion rate in any environment (solid, liquid or gas) using the first Ohm's Law to relate measured electrical resistance of a Sensing Element to its geometrical variations induced by corrosion (ER probes) & using the electrochemical law of potential deviation.
The data loggers are connected to ER & LPR Probes by suitable cables and are located near the probes
Data can be transferred to MaxiCorr with terminal function through a cable RS232.
The measurements are timed and memorised in an internal memory.

Operating principle

The MegaCorr data logger reads the ratio of electrical resistance between an exposed sensing element and a similar, protected reference element, which provides thermal compensation for the ER Probe.
The MegaCorr data logger reads the electrical resistance of the corroding electrode-electrolyte interface (LPR Probe).
Using the appropriate relationship between electric resistance and geometry of the sensing element, the ER Data logger can calculate the variation in cross section of the sensing element and thereby the corrosion penetration; hence, knowing the time from the last measurement of corrosion rate.
For LPR Probes, the polarization resistance is measured as the ratio of the applied DC potential to the flowing current and is constant over a small range (<20mV) and is related to corrosion rate.

Specifications

- Software controlled, reprogrammable of the probe readings, upon simple operator commands via a portable PC, or via MaxiCorr
- Programmable rate of measure 0.1-1000 Hour.
- Remain unattended from uploading recorded measures for up 6 months at the minimum rate (1 hour) or for up 2 Years with a standard rate interval of 8-12 hours.
- Hardware & software compatible with major Manufacturer's equipment.
- Set Mode: Auto (timed measuring with autostore) & full autoranging
- Typical Charge Life: 200 days @ 1 reading/hr
- Automatic shutdown feature
- Battery duration: 14 hours in continuous operation or 1000 measurements or 200 days in auto store.

e-mail: info@europcorr.com - www.europcorr.com

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ER & LPR Field Unit Data logger

Size / Weight	280x250x10mm/ 5 Kg (11lbs) (excluding cables) with mounting bracket
Storage capacity	3000 readings, Built- in non-volatile memory
Power	9.6 -12 VDC from Remote or 8 pcs standard AA 1.2V DC rechargeable Ni/Mh batteries or 1.5V Alkaline
Enclosure	AISI 316L corrosion resistant stainless steel, Deluge proof, IP 68
Communications	RS 232, RS 485 or 4-20mA loop, optionally with Hart Protocol
Channel	one single channel or multiple channels
Accuracy	+/-1%
Resolution	0.1%
Operating temp.	-40°C to +70°C
Certification	Intrinsically safe, CE & ATEX Certified ⟨Ex⟩ II [1]/2G [Ex ia]/Ex e mb IIC T5 IP68
Data stored	Year, Month, Day, Hour, Minute, Probe Tag number (real time clock included), result
Probe type	ER probes, LPR probes (2 or 3 electrodes)

ORDERING INFORMATION:

Description	Part No.
MegaCorr for Terminal Communication	392010-X*
MegaCorr for online Communication	392011-X*
MegaCorr for 4-20 mA Interface	392012-X*
MegaCorr Probe Cable with Probe Adapter for Probes in 2" Access Fitting	392016
Cable gland M20	392017

* Number of channel