Slimline ICL Test Station

Corrosion Rate and Cathodic Protection Data
Ideal Interference Corrosion Analysis

FEATURES

Complete instrumented test station (Big Fink or customized)

2 probe channels (native measurement option)

ER probe for measurement of corrosion rate

Long battery life – solar option

Remote monitoring - cellular or satellite via Masterlink module

GPS time synchronization

Data presentation, analysis, reporting in CP*Manage Web

MEASUREMENTS

- ✓ Corrosion Rate
- ✓ DC potential
  - ✓ On (pipeline)
  - ✓ instant-off (pipeline)
  - ✓ Instant-off (coupon)
  - ✓ IR-free (coupon)
  - ✓ Native (option)
- ✓ DC current density
- ✓ AC voltage
- ✓ AC current density
- ✓ Spread resistance

DATA AT YOUR FINGERTIPS – WHEREVER YOU ARE!

The Slimline ICL (Interference Corrosion Logger) is designed for comprehensive CP and AC or DC interference analysis and utilization of high sensitivity ER probes allows for direct verification of the effectiveness of any mitigation measures. Any measurement of corrosion can be analyzed wrt. relevant electrical fingerprints. The logger can monitor 2 ER probes, for example one 1cm^2 and one 10cm^2, or one connected and one native probe (custom setting).

The MetriCorr ICL test station is part of a complete remote monitoring system for pipelines and associated components like T/R's, line current spans, critical bonds, etc.

Like the rest of the MetriCorr Slimline product family, the ICL is intended as a remote monitoring unit (RMU), a data logging device, or simply as a spot reading device. It may be operated through the MetriCorr CP*Manage Web or through the MetriCorr iOS/Android App.

The Slimline product family fits into Big Fink test stations (see example on the right), MetriCorr tests stations, junction boxes, or can be customized to fit into the operator's preferred embodiment. Refer to info sheet IS-PL-70.

Robust surge protection based on spark gaps for high surge current handling:
- Eliminates the risk of leakage current and measurement errors
- Eliminates high voltage isolation requirements



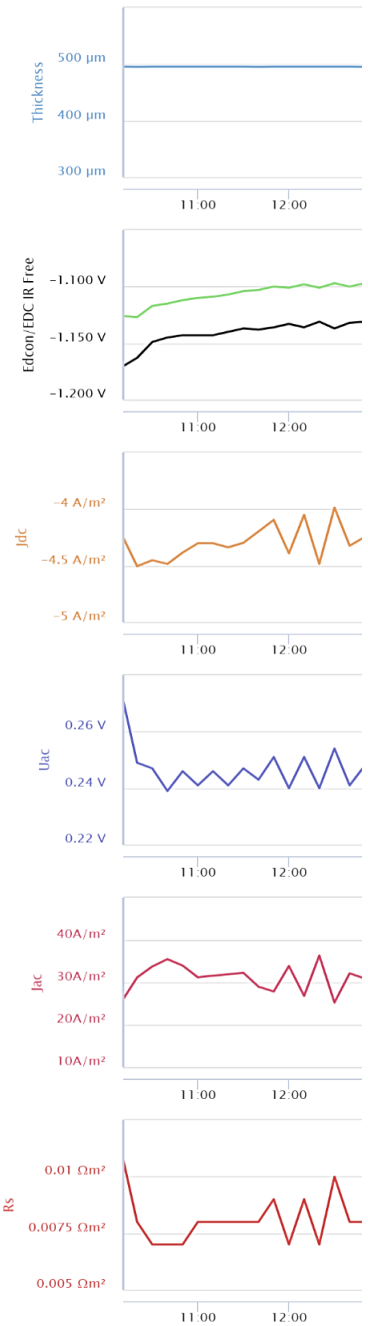
Installation example





Technical specifications - ICL

Storage capacity	+200 000 readings	
Logging interval	10 min – ∞, Typically 1 hour 1s (intensive mode)	
Power supply	6 to 15 VDC (Max. 200mA @ 12VDC)	
Battery Lifetime	Depends on battery selection – see IS-PL-70-03 “Test Stations & Power Supply”	
Casing **Humidity** **Temperature**	IP65 0 to 100% RH condensing conditions -40°C to +85°C (logger)	
Test Station Options	- Big Fink (Solar/Battery powered, see page 1) - Junction box (Solar/battery powered) - Junction box (AC supply 100–240VAC with surge protection) - MetriCorr Type Test Station - Customer’s own specifications	
Size L x W x H, weight	250 x 68 x 81 mm, 390 g	
Communication	- Cellular: LTE Cat M1 (4G LTE, 5G-compatible IoT technology) - Satellite (optional) - Android or iOS App - Bluetooth Low Energy - Ethernet (optional) - GPS/GNSS Position and Time Synchronization	
ER/coupon channel characteristics	Resistance range Precision (4σ) Repeatability (2σ)	156 mΩ 0.4 µΩ 0.2 µΩ
Measurements	Input resistance Voltage Range Voltage Resolution DC Voltage Accuracy AC Voltage Accuracy Current Range DC Current Accuray AC Current Accuray AC to DC rejection	+ 10.0 MΩ ± 100 V / 100 Vrms 0.1mV DC / 1 mV AC ± 0.8mV ± 0.3% read. ± 1mV ± 0.5% reading 300 mA/probe ± 1µA ± 0.6% reading ± 2µA ± 0.6% reading - 80 dB
Surge Protection EN/ISO 61000-4-5, class 4	Nom. discharge current Lightning impulse current Optional (Pipe-Reference)	10 kA @ 8/20 µs 2.5 kA @ 10/350 µs 50 kA @ 8/20 µs 50 kA @ 10/350 µs



*CP*Manage Web data example*

