

# elecsys TRACKER CR

## Comprehensive AC Interference Monitoring System with Built-in ER Probe Transmitter

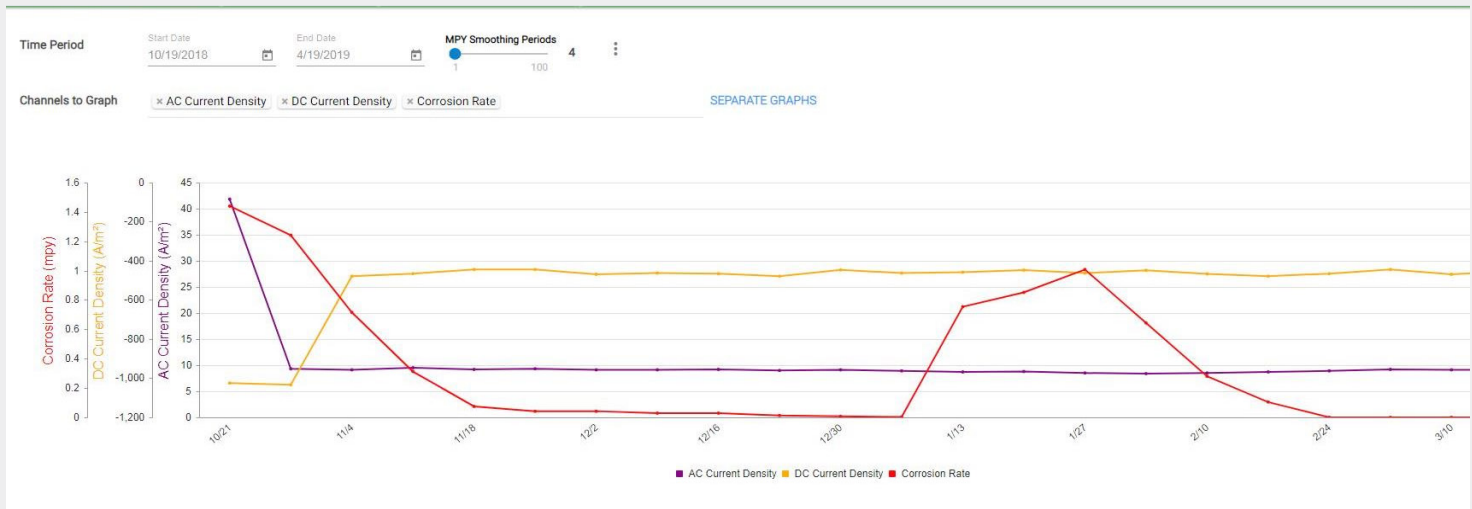
The Tracker CR is the latest in our popular Tracker family of test station monitoring products.

The Tracker CR is designed to be the all-in-one solution for data acquisition and corrosion risk assessment in high AC interference areas.

The Tracker CR measures, records, and transmits pipeline potentials, current densities, and corrosion rate values for compliance with the NACE SP21424 standard. Typical measurement intervals for standard compliance are taking voltage measurements and current density measurements hourly in order to account for the expected fluctuations occurring in AC interference.

Like all of the Watchdog CP monitoring systems, the Tracker is designed and manufactured in the USA at our state of the art manufacturing facility in Olathe, Kansas.

Take control and avoid the catastrophic structural damage that nearby electrical fields can cause. Maintain high integrity of your pipeline management program with the new Watchdog Tracker CR.



### APPLICATIONS

- Corrosion Rate measurements using a custom-designed 1cm<sup>2</sup> ER probe
- AC & DC current density measurements
- On/Off potentials at coupon test stations
- Turnkey system including monitor and ground probe
- Cost-effective communication
- Built-in data logger
- Elecsys Connect web-interface

## SPECIFICATIONS

Part Number	Verizon CAT-M modem: TR-TC-N7 ATT LTE-M modem: TR-TC-N8 IDP satellite telemetry: TR-TC-S3																																	
Input Connections	Structure 1 (pipeline) Structure 2 (second pipeline or “native” coupon) Reference cell “Protected” coupon “AC” coupon (Note: The Tracker CR enables AC and DC current density measurements to be recorded using a common coupon, or separate coupons depending on the requirements for compliance determined by the operator.) Shunt/CT coil + Shunt/CT coil – Custom ER probe																																	
Measurements	<table border="1"> <thead> <tr> <th>Type</th> <th>Range</th> <th>Resolution</th> </tr> </thead> <tbody> <tr> <td>DC potential (structure 1 to reference)</td> <td>-10V to +10V</td> <td>1mV</td> </tr> <tr> <td>AC potential (structure 1 to reference)</td> <td>0 – 35V rms</td> <td>10mV</td> </tr> <tr> <td>DC Potential (structure 2 or native to reference)</td> <td>-10V to +10V</td> <td>1mV</td> </tr> <tr> <td>AC potential (structure 2 or native to reference)</td> <td>0 – 35V rms</td> <td>10mV</td> </tr> <tr> <td>Protected coupon “instant off” (coupon to ref.)</td> <td>-10V to +10V</td> <td>1mV</td> </tr> <tr> <td>AC current density (structure 1 to coupon drain)*</td> <td>0 – 500 mA rms</td> <td>0.1mA</td> </tr> <tr> <td>DC protection current density (structure 1 to coupon)</td> <td>-100mA to +100mA</td> <td>0.6µA</td> </tr> <tr> <td>AC drain current (voltage across external CT coil)</td> <td>0 – 500 mV rms</td> <td>0.1mV</td> </tr> <tr> <td>DC bond shunt current (across external shunt)</td> <td>-150mV to +150mV</td> <td>0.1mV</td> </tr> <tr> <td>Corrosion Rate</td> <td>Probe element thickness</td> <td>+/-0.1%</td> </tr> </tbody> </table>	Type	Range	Resolution	DC potential (structure 1 to reference)	-10V to +10V	1mV	AC potential (structure 1 to reference)	0 – 35V rms	10mV	DC Potential (structure 2 or native to reference)	-10V to +10V	1mV	AC potential (structure 2 or native to reference)	0 – 35V rms	10mV	Protected coupon “instant off” (coupon to ref.)	-10V to +10V	1mV	AC current density (structure 1 to coupon drain)*	0 – 500 mA rms	0.1mA	DC protection current density (structure 1 to coupon)	-100mA to +100mA	0.6µA	AC drain current (voltage across external CT coil)	0 – 500 mV rms	0.1mV	DC bond shunt current (across external shunt)	-150mV to +150mV	0.1mV	Corrosion Rate	Probe element thickness	+/-0.1%
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Data-logging	Embedded SD - >15 years of samples at 1 minute sample rates. Sample frequency up to every 1 minute																																	
Power	Lithium battery (3 to 5 year life under normal conditions and operating parameters) Connection for external power: 6.5 to 18 VDC (nominally 12V solar). Solar panels or power system not supplied by Elecsys																																	
Operating Environment	Temperature: -30°C to +70° Humidity: 0-95% non-condensing Enclosure: NEMA 4X polycarbonate																																	

## MITIGATE AC WITH CERTAINTY!

The Watchdog Tracker is ideal for all test point and critical bond monitoring applications, but was designed particularly to meet the challenges of induced AC interference on buried pipelines. Elecsys Corporation has led the way in providing the CP professional with monitoring and remote data-logging devices optimized for measuring critical AC values on the pipeline. Elecsys continues to lead the pack with the new Tracker CR by incorporating corrosion rate measurement, along with the ability to measure all of the critical pipeline, coupon measurements available on our regular Tracker and Tracker B units. The Elecsys Tracker family of products provides “around the clock” assurance that your AC mitigation is operating properly and that induced AC on the pipeline is reduced to acceptable levels. The remote data-logging gives you access to all of the measurements from any web enabled device, from anywhere in the world!

Please visit us at [www.elecsyscorp.com/tracker-cr](http://www.elecsyscorp.com/tracker-cr)

## MAJOR MARKETS



Oil



Gas



Water



Electrical