

elecsys WATCHDOG TRACKER

Remote Monitor for Test Stations, Critical Bonds and AC Mitigation Applications

The Watchdog Tracker remote monitoring system features state of the art measurement precision and remote data-logging capability, making it the ideal choice for every test point and bond monitoring application. The Tracker can be used with single, double, or triple coupon test stations. The Tracker measures and records all standard test point values plus: AC potential, AC current density, and AC drain current.

All measurements are stored to the internal memory and can be remotely downloaded from the unit using any web-enabled device. All alarms, schedules, and scan rates are programmable over the web. The Tracker is built to withstand extreme conditions and perform reliably in the harshest environments. 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.



FEATURES



Programmable over the web



Operates on battery or solar power



Built-in data logging w/ 4GB memory card
(Equivalent to 15+ years of data storage)



Surge resistant circuit design



Web-based data access



Ruggedized construction

APPLICATIONS

- Induced AC voltage measurement
- AC current density and drain current
- Critical bonds
- Isolation flange bonds
- "On/Off" voltage potentials
- Reverse current switches

SPECIFICATIONS

Part Number	CDMA cellular telemetry: TR-N1 , TR-ENC-N1 GSM cellular telemetry: TR-N3 , TR-ENC-N3 IDP satellite telemetry: TR-S3 , TR-ENC-S3		
Input Connections	Structure 1 (pipeline) Structure 2 (second pipeline or “native” coupon) Reference cell “Protected” coupon “AC” coupon (Note: if no dedicated AC coupon is used AC measurements can be taken on the “protected” coupon) Shunt/CT coil + Shunt/CT coil –		
Measurements	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	0.1mA
	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
Data-logging	Embedded SD - >15 years of samples at 15 second sample rates. (faster rates available with custom configurations) Sample frequency up to every 15 seconds		
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: -40°C to +70° Humidity: 0-95% non-condensing Enclosure: NEMA 4X polycarbonate		
Size	14" (356mm) x 3.375" (85.8mm) x 3.125" (79.4mm)		
Installation	Built-in mounting tabs for mounting to standard PVC riser 7' (2.1m) color coded connection cable		

* (Note: AC current density can alternately be a calculated value using the AC voltage potential measurement and the soil resistivity if known)

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. The Tracker continues to lead the pack by incorporating higher resolution current density and current drain measurement accuracy, support for dedicated AC coupons, and the ability to measure current density directly at the coupon or using a calculated value from the AC voltage and soil resistivity value. The Tracker 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

MAJOR MARKETS



Oil



Gas



Water



Electrical