



# **CATHODIC PROTECTION MONITORING**

#### **OVERVIEW**

The MERLIN7 Transformer Rectifier Monitor is a compact Remote Monitoring Unit (RMU) that can be housed within the rectifier cabinet or supplied in a separate enclosure ready for mounting externally.

MERLIN7 Transformer Rectifier Monitors carry out the functional checks of the rectifier output (voltage and current) required in order to ensure a continuous CP supply to the pipeline and to comply with \*regulatory guidelines. The unit checks that the rectifier remains powered by its external electrical supply. If the power fails, an alarm is transmitted and the unit's internal batteries take over monitoring for up to 2 years. They quickly repay their capital cost when compared to monthly manual checks.

The MERLIN7 Transformer Rectifier Monitor offers additional CP measurements (ON and OFF potentials) as well as the facility to synchronise remotely with other rectifiers on a pipeline for CIPS (Close Interval Potential Surveys) or DCVG (Direct Current Voltage Gradient) surveys. Additionally the unit controls a solid state Interrupter to provide a signal for tracing the pipeline route.

All measurements are taken automatically by the unit and data is seamlessly sent in a management report to the system HQ where it is displayed and archived online via iCPSM4.

With more frequency bands and better mobile coverage the MERLIN7 range of RMUs have greater geographical coverage than ever before.

## **FEATURES AND BENEFITS**

- Compatible with 4G and 2G networks
- Mobile phone test & set-up, on-demand readings and control of rectifier output relay
- Sealed weatherproof unit with wide operational temperature
- Robust lightning protection
- AC powered (110V to 230V) with 2 year battery backup. DC power option for solar stations
- ▶ Hourly check of rectifier outputs, ON/OFF potentials
- Synchronised to 1ms precision
- ► Start with the ON or OFF for interruption, cycles up to 240 seconds
- Compatible with SSR's and \*\*mercury relays
- Pipeline locate
- Immediate alarm generation (user preset thresholds on all channels)
- Alarms when protection inadequate or power fails at rectifier
- Weekly report gives min, max and average of all channels for the week



Excel model shown above

### **SPECIFICATIONS**

#### **DIMENSIONS (HXWXD)**

> 85mm x 125mm x 55mm

#### INGRESS PROTECTION

► IP67

#### **TEMPERATURE RANGE**

► -40°C to +85°C 100% condensing humidity

#### COMMUNICATIONS

► 4G and 2G networks

#### **POWER**

- ➤ AC powered 110V to 230V
- ▶ DC power option also available

# BATTERY BACKUP

- 2 year life
- Replaceable battery module

### SOFTWARE MANAGEMENT

► iCPSM4

 $Specifications \ are \ subject \ to \ change \ without \ prior \ notice.$ 

\*regulatory guidelines - where applicable

\*\*mercury relays - please ensure that you abide by configurations / guides / laws relevant to the country in which the equipment is being used

# **ABOUT US**

Abriox is a dynamic high technology company specializing in remote monitoring and control for pipelines with European and International Headquarters in the UK and US Headquarters in Texas.

### **GET IN TOUCH**



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