

# G-DART

## FOR RECTIFIERS

### REMOTE DATALOGGING UNIT

**The power of a data-logger in your RMU and the data analysis capability to provide you with:**

- Actionable daily reports that analyze data for you
- Monitor all rectifier parameters
- GPS synchronized interruption
- Off-potential and coupon current density
- Control output of automatic rectifiers
- Efficiency of any variable measured in percentage of time working within threshold
- Predictive anode life span
- Track reliability of power supply and send alarms for power loss with integrated battery back-up

### Readings per Second are Summarized in Maximum, Minimum, Average values

#### READINGS

**The G-Dart provides up to 10 different readings from 5 galvanically isolated dual terminals, enabling you to measure AC and DC values across a fully selectable range, including but not limited to:**

- Current Output (DC & AC)
- Voltage Output (DC & AC)
- Structure Potential (DC & AC)
- Coupon Instant-Off Potential
- Current Density (AC & DC)
- Dry contact for breaker position, TR input voltage/current
- Real Time Alarms for out of threshold readings email/sms
- Amount of time the reading was outside of the threshold

#### DAILY ANALYSIS REPORT

The daily summary report analyzes the per-second data, providing a summary that includes average, minimum, and maximum values along with the date and time of detection; mean square deviation; trend and variability; the total time out of threshold; and alarms.

#### DATALOGGING FREQUENCY: READINGS PER SECOND

Data is logged every second across all channels, storing up to 86,400 samples per day for 62 days, depending on enabled channels, with on-demand data transmission available.

#### OPTIONAL ADD-ON FEATURE:

##### Remote Control of TR Output

Real time connection to remotely modify the TR output or set point. Constant: Voltage, Current, Potential.

#### INSTANT-OFF COUPON READINGS CONFIGURABLE IN MILLISECONDS

The integrated solid-state switch allows for instant-off measurements every second, with interruption and measurement cycles configurable in milliseconds (compliant with SP0104 and ISO 22426).

#### OPTIONAL ADD-ON FEATURE: GPS synchronized interruption

For cyclic On-Off interruption.

#### RECHARGEABLE BATTERY BACK UP

The included rechargeable battery allows the G-DART to continue working and send an alarm when the power supply is interrupted.

#### FUTURE READY

Its modular design allows for field upgrades without removal, including retrofitting modules with new features and communication technology updates, and switching from cellular to satellite and vice versa.

## Remote Datalogging To Protect The Integrity Of Your Assets

**The G-DART technology is a game-changing approach to RMUs by offering you:**

- 1) High-frequency readings that were previously only available from data loggers.
- 2) Edge computing power to analyze the data directly in the field unit.
- 3) An intuitive algorithm that presents the information on your computer in a summarized, actionable report.

*This efficient solution delivers to you the granularity of data that shows an accurate picture of the situation without overwhelming you in vast amounts of information, as it performs all the analysis automatically for you.*

**With its high-frequency sample rate and advanced analysis capabilities, G-DART provides:**

- More comprehensive monitoring for High and Moderate Consequence Area sites (mega rule HCA and MCA).
- Optimize the output of your impressed current CP system by integrating readings from remote critical test points to control the output of your rectifier.
- Predictive maintenance of your rectifier.
- Track the reliability of your CP system to ensure safety.
- Measure the efficiency of your system to drive savings.



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### REMOTE DATALOGGING UNIT

## An Integrated Solution For Greater Efficiency

### WEB BASED PLATFORM -WEBPROCAT

The data collected from cathodic protection RMU/RDUs or manual readings are stored and managed in the WEBPROCAT portal. This versatile system is designed to enhance Cathodic Protection monitoring and analysis, providing everything from **actionable Management Summary** reports, or **daily status updates for technicians** to detailed graphics for **Cathodic Protection Specialists diagnosing/solving a complex problem**. It expands standard features such as analysis, time trends, graphical representation, maps, regulatory compliance, reporting, device configuration, remote control or rectifiers, synchronized interruption, data export, integration with third-party applications (SCADA, SAP, CARTOGRAPHY, ProActive®, Bass Trigon®, etc.), and more.

### MODULAR DESIGN - EASY INSTALLATION

Easily fits inside the rectifier cabinet for quick installation, with accessible terminals for manual readings. Its modular design allows for upgrades in the field.

### MAINTENANCE & DIAGNOSTICS

The device transmits diagnostic parameters (communication, battery, alarms, etc.) to optimize field work and allows for remote or manual firmware updates.

### BLUETOOTH APP - FIDO UNIVERSAL

Field activities by the operator, including manual measurements, installation and maintenance, are recorded in the Fido Universal Bluetooth App and synced with the WebProCat platform.



#### COMMUNICATION

- Local: BLE with Fido Universal management software.
- Remote: 2G/3G/4G  
Iridium Satellite  
Ethernet  
SCADA, etc.

#### MECHANICAL SPECS

- Dimensions: 5.1 x 3.3 x 3.0 in ; 12.9 x 8.5 x 7.7 cm
- IP68/IK07
- Weight: 1.8 lbs ; 0.8 Kg
- Operating temperature: -4 °F to + 185 °F ; -20 °C to + 85 °C
- Installation: Inside rectifier cabinet or secondary enclosure

#### POWER SUPPLY

- DC Input: 9-30 VDC
- AC Input: 90-240 VAC
- Integrated: rechargeable battery backup, provides up to 4 weeks battery operation

#### COMPLIANCE WITH STANDARDS

- ISO 15589-1, ISO 22426, ISO 18086, ISO 21857  
ISO 22426
- EN 12954, EN 13509
- UNI 11094, UNI 10950, Linee Guida APCE
- NACE SP0169, TM0497, SP0104
- IEC 62443 (CYBERSECURITY)

#### CHANNEL SPECIFICATIONS

- Up to 10 readings from 5 galvanically isolated dual terminals
- Simultaneous AC/DC measurement on the same physical channel
- Selectable scale ranges  $\pm 500$  mV,  $\pm 20$  V,  $\pm 50$  V,  $\pm 100$  V – DC
- Measurement accuracy: 0.02% FS
- Instant OFF Potential in coupons configurable in milliseconds
- Over voltage protection 10/350 uS > 5KV.



## Get In Touch



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