**Goliath**

The Goliah G4C is a Remote Monitoring Unit (RMU) specifically developed for the UK market. It is derived from the proven G2 / G4 family of remote monitoring units which are used extensively in Europe. As a remote-controlled data logger, developed to suit test posts particular to the UK and Ireland.

When installed with a compatible Transformer Rectifier, the Goliah unit also offers the ability to remotely control the Rectifier – using low power consumption technology, it is powered by lithium batteries which give a typical autonomous working life of 48 months. Additionally, mains power or a solar panel grid, a battery backup is used to provide indefinite operation.

The Goliah unit can be accessed locally or remotely, to set up monitoring protocols and to retrieve stored data. Local access is achieved by connecting the device to a computer, or more conveniently by Bluetooth connection to a portable device such as a laptop, tablet or mobile phone. A bespoke application for mobile devices makes the Bluetooth interface both simple and fast, powered through both Android and iOS. Remote access is through a range of options, including GPRS/GSM, SMS, GPRS/SMS, and a range of options leading to a data logger G4C.

**Technical Specifications:**

- **Measurement Channels:** Up to 5 configurable channels for Transformer Rectifiers or Test Posts. Configurability per TR, per TR or per coupon.
- **Control:** Transformer Rectifiers with a suitable digital interface can be controlled remotely by the Goliah G4C and WebProCat software. Auto-potential control of the TR can be based on potentials recorded at any Goliah Test Post Monitor, or the potential measured at the Transformer Rectifier. Not applicable to manual TRs.
- **Battery Life:** Operating life 48 months. External source: Solar Panel (12V / 24V), Mains (with a 12V AC / DC adapter).
- **Operational Data:**
  - **Temperature:** Operating: -20°C to +60°C
  - **Lightning and Surge Protection:** Impulsive transient protection: 8/350μs > 5kV
  - **Data Sampling:** Instant Off Logging, Instant Off cycles (9 hours interval), with Eon and Eoff coupon logging
  - **Transmission Rate:** Detailed data (up to 85,000 samples)
  - **Storage:** Up to 85,000 samples per day (1 reading per second), per channel, stored in a cyclic queue of 7 to 62 days depending on configuration. Daily summary data stored for a period of 365 days.

**REMOTE MONITORING**

**HEAD OFFICE**

Cathodic Protection Co Ltd
Venture Way
Grantham
Lincolnshire
NG31 7XS
United Kingdom
Tel: +44 (0)1476 590666
Email: cpc@cathodic.co.uk

**GLOBAL AGENCIES**

For details of our network of agents please visit our website:

www.cathodic.co.uk

**www.cathodic.co.uk**
Clearly the best protection...

Cathodic Protection Co Ltd, founded in 1982, was one of the first companies in the United Kingdom set up specifically to provide equipment and engineering services for the cathodic protection of pipelines, storage tanks, well casings and marine structures for the oil, gas, petrochemical, water and power industries.

The company has teamed with Automa SRL from Genoa in Italy, who have been providing remote monitoring and control services for 30 years, with over 18,000 units in service worldwide. The partnership will ensure the continuing development of products and services to meet the demands of all users.

Automa’s Goliah range of remote monitoring devices has been developed to service the oil, gas, petrochemical, water and power industries.

The Goliah forms part of an integrated solution offered by Automa which includes the Transformer Rectifier (TR) range of equipment.

Automa’s solution for CP data monitoring is unique, having much greater functionality than existing products on the market.

Detailed Investigation

The display tool also allows the daily summary data to be viewed over a longer time period. In addition to maximum, minimum and average potentials, additional data such as TR failure etc. can be automatically highlighted. In addition, data can be colour-coded based on functional features such as road crossings, etc. New assets or data points can be easily added using the mapping tool without the need for detailed GPS co-ordinates.

A wide range of reports can be exported from the WebProCat software in most commonly used formats (PDF, XLS, CSV, TXT). This makes it easy to provide data to interested third parties such as regulatory authorities, or for offline analysis.

Standard reports are available as a mouse click and comply with both in content and form, to API guidelines and ION regulations.

Detailed Investigation

The powerful display tool allows the user to analyze the 86,400 daily measurements recorded by the Goliah Remote Monitoring Unit. The data records are shown graphically for the period of time set into the analysis. Areas of interest can be highlighted and different actions can be taken, such as automatically downloading the data or creating a map of potential issues.

Simple Set up of Monitoring Equipment

The software includes the following features:

- Bluetooth communication with Goliah devices
- Multi-language capability
- Configurable parameters to be recorded by Goliah device
- Downloads stored data from Goliah
- Remote control of TR when Goliah unit fitted to compatible unit
- Analysis tools for CP data

Benefits of WebProCat include:

- Daily summary of CP potentials based on 86,400 data records
- Ability to download 86,400 daily data points when further investigation required
- Instant off potentials give accurate assessment of protection levels
- Reporting by specific pipelines or systems
- Graphical presentation of CP data
- Customisable user access levels
- Mapping feature displaying location of Goliah installations
- Remote configuration of Goliah devices
- Multi-language capability
- Bluetooth communication with Goliah devices (BLE)
- Powerful Data Management Tools
- Detailed Investigation

The powerful display tool allows the user to analyze the 86,400 daily measurements recorded by the Goliah Remote Monitoring Unit. The data records are shown graphically for the period of time set into the analysis. Areas of interest can be automatically highlighted. In addition, data can be colour-coded based on functional features such as road crossings, etc. New assets or data points can be easily added using the mapping tool without the need for detailed GPS co-ordinates.

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By Automa

Established in 1982

20 Years of Experience

2017

2022

WebProCat

Monitoring Equipment

FIDO is the support application for the installation and maintenance in the field for Goliah products.

The interface is accessible with any OS browser. Available on Windows laptop platform or smartphone and tablet.

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When installed with a compatible Transformer Rectifier, the Goliah unit also offers the ability to remotely control the Rectifier - using low power consumption technology, it is powered by three batteries which give a typical autonomous working life of 48 months. Alternatively, mains power or a solar panel wired to a battery bank can be used to provide indefinite operation.

The Goliah unit can be accessed locally or remotely to set up monitoring protocols and to retrieve stored data. Local access is achieved by connecting the device to a computer, or more conveniently by a mobile connection to a portable device such as a tablet or mobile phone. An app for mobile devices makes the interface both simple and fast, powered through both Android and iOS. Remote access is through a range of options including GPRS/GSM, Wi-Fi or 3G/4G connection.

Technical Specifications:

Measurement Channels:
Up to 5 configurable channels for Transformer Rectifiers or Test Posts. Configurable for Volts, Amps, On, Off or Coupon potentials

Control:
Transformer Rectifiers with a suitable digital interface can be controlled remotely by the Goliah G4C and WebProCat software. Auto-potential control of the TR can be based on potentials recorded at any Goliah Test Post Monitor, or the potential measured at the Transformer Rectifier.

Battery Life:
Operating Life: 48 months.
External Source: Solar Panel (12V/24V)
Mains (with a 12V DC/DC adapter)

Operational Data:
Operating Temperature: 20°C to +60°C
Lightning and Surge Protection: Impulsive transient protection 8/20μS > 3KV
Data Sampling:
Instant Off Logging: Instant off cycles (>1ms intervals), with Eon and Eoff coupon logging
Transmission Rate: Detailed data (up to 65,535 samples)
Storage: Up to 65,535 samples per day, 1 reading per second, per channel, stored in a cyclic queue of 7 to 62 days depending on configuration. Daily summary data stored for a period of 365 days.

Remote Monitoring

www.cathodic.co.uk

Accreditations:

GLOBAL AGENCIES
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Clearly the best protection...

Cathodic Protection Co Ltd, founded in 1950, was one of the first companies in the United Kingdom set up specifically to provide equipment and engineering services for the cathodic protection of pipelines, storage tanks, well casings and marine structures for the oil, gas, petrochemical, water and power industries.

The company has teamed with Automa SRL, from Ancona in Italy, who has been providing remote monitoring and control solutions for 30 years, with over 16,000 units in service worldwide. The partnership will ensure the continuing development of products and services to meet the demands of our clients.

Automa’s Goliah range of remote monitoring devices has been developed to service specific cathodic protection markets across Europe, making Automa a global brand worldwide. The partnership will ensure the continuing development of products and services to meet the demands of our clients.

Automa’s solution for CP data monitoring is unique, having much greater functionality than existing products on the market. The Goliah unit logs 86,400 records (Max, Min, Average) and shows if a pipeline is protected. However, should the summary report suggest an issue, the CP engineer can remotely download all the data to identify the cause of the problem, such as AC interference, DC traction problems, telluric currents, TR failure etc.

Installing a corrosion coupon with a Goliah unit also allows real time measurements to be recorded. Experience in Europe has shown that this approach allows Transformer Reducer outputs to be reduced, saving energy and extending the lives of steels and groundworks. On pipelines are no longer required to gauged if a pipeline is protected.

...for your investment

Simple Set up of Monitoring Equipment

FIDO is the support application for the installation and maintenance in the field for Goliah products.

The interface is accessible with any OS browser. Available on Windows laptop platform or smartphone and tablet.

It provides the following features:
- Bluetooth communication with Goliah devices (BLE)
- Multi-lingual capability
- Configures parameters to be recorded by Goliah device
- Downloads stored data from Goliah
- Remote control of TR when Goliah unit fitted to compatible unit
- Analysis tools for CP data

The FIDO infrastructure has been developed using the latest RIA (Rich Internet Application) technologies, guaranteeing a fast and easy user experience and high level performance.

Automa’s solution for CP data monitoring is unique, having much greater functionality than existing products on the market. The Goliah unit logs 86,400 daily data points when further investigation required

Benefits of WebProCat include:
- Daily summary of CP potentials based on BS 4360 data records
- Ability to download BS 4360 daily data points when further investigation required
- Instant off potentials give accurate assessment of protection levels
- Reporting by specific pipelines or systems
- Graphical presentation of CP data
- Customisable user access levels
- Mapping feature showing location of Goliah installations
- Remote configuration of Goliah devices

Powerful Data Management Tools

The WebProCat software suite manages the cathodic protection data from Goliah remote monitoring devices.

The powerful display tool allows the user to access the BS 4360 daily measurements recorded by the Goliah Remote Monitoring Unit. The data records are shown graphically for the periods defined for each location. Any of interest can be selected and will be displayed with any two points or a fixed period from a certain time. Different periods in the day can be compared by overlaying the colour-coded graph from each selected.

The display tool also allows the daily summary to be viewed over a longer time period. In addition to maximum, minimum and average potentials, other CP data can also be displayed. In this way seasonal or longer term trends can be identified.

A wide range of reports can be exported from the WebProCat software in most commonly used formats (PDF, XLS, CSV, TXT). This makes it easy to provide data to interested third parties such as regulatory authorities, or for offline analysis.

Standard reports are available as a museum click and comply both in content and form, to API, guidelines and UFI regulations.

Detailed Investigation

The powerful display tool allows the user to navigate the BS 4360 daily measurements recorded by the Goliah Remote Monitoring Unit. The data records are shown graphically for the periods defined for each location. Any of interest can be selected and will be displayed with any two points or a fixed period from a certain time. Different periods in the day can be compared by overlaying the colour-coded graph from each selected.

The display tool also allows the daily summary to be viewed over a longer time period. In addition to maximum, minimum and average potentials, other CP data can also be displayed. In this way seasonal or longer term trends can be identified.

A wide range of reports can be exported from the WebProCat software in most commonly used formats (PDF, XLS, CSV, TXT). This makes it easy to provide data to interested third parties such as regulatory authorities, or for offline analysis.

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**Goliath**

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When installed with a compatible Transformer Rectifier, the Goliath unit also offers the ability to remotely control the Rectifier - using low power consumption technology, it is powered by lithium batteries which give a typical autonomous working life of 48 months. Alternatively, mains power or a solar panel will enable a battery backup to be used to provide indefinite operation.

The Goliath unit can be accessed locally or remotely to set up monitoring protocols and/or retrieve stored data. Local access is achieved by connecting the device to a computer, or more conveniently by Bluetooth connection to a portable device such as a laptop, tablet or mobile phone. A bespoke application for mobile devices makes the Bluetooth interface both simple and fast, powered through both Android and iOS. Remote access is through a range of options including GSM / GPRS / UMTS (2G / 3G / 4G) connection.

**Technical Specifications:**

**Measurement Channels:**
Up to 5 configurable channels for Transformer Rectifiers or Test Posts. Configuration for Voltage, Amperes, On, Off or Coupon potentials.

**Control:**
Transformer Rectifiers with a suitable digital interface can be controlled remotely by the Goliath G4C and WebProCat software. Auto-potential control of the TR can be based on potentials recorded on any Goliath Test Post Monitor, or the potential measured at the Transformer Rectifier. Not applicable to manual TRs.

**Battery Life:**
Operating Life: 48 months.
External Source: Solar Panel (12V / 24V), Mains (with a 12V AC / DC adapter).

**Operational Data:**

**Operating Temperature:**
-20°C to +60°C

**Lightning and Surge Protection:**
Impulsive transient protection to IEC 61000-4-5

**Data Sampling:**
Instant Off Logging: Immediate off cycles (>1ms intervals), with Eon and Eoff coupon logging.
Transmission Rate: Detailed data (up to 85400 samples).
Storage: Up to 85400 samples per day (1 reading per second, per channel, stored in a cyclic queue of 7 to 62 days depending on configuration. Daily summary data stored for a period of 365 days.

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Operating Life: 48 months.
External Source: Solar Panel (12V / 24V), Mains (with a 12V AC / DC adapter).

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**Remote Monitoring**

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**Accreditations:**

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