The latest future proof technology from Anode Engineering promises to drastically reduce costs for meeting your pipeline monitoring and reporting requirements.

GREENAMP DAISY CHAIN DATA MODULE

A GreenAmp Daisy Chain Data (DCD) module at each test point measures the pipeline potential. It typically records every hour and transmits once a day and wirelessly communicates with other boxes along the pipeline to share this data. In an area of no mobile coverage the information is Daisy Chained wirelessly between each module until it reaches a module with mobile coverage or network access (Bluetooth, Wi-Fi etc.) The data is then uploaded to the cloud for interpretation by Anode Engineering's engineers or to the asset owner as required through a dedicated website/server arrangement.

This removes the need for expensive satellite connections and even minimises the requirement of mobile network connections. A GreenAmp DCD system reduces costs, saving countless hours of planning and driving whilst reducing the need for personnel in the field along with the associated occupational health and safety issues. Not to mention land access, weed management issues and weather delays.

The modules have been tested to Daisy Chain with a wireless range of 10 kilometres and repeater modules can help extend the range as required, with self-healing networking capabilities adding to the network reliability.

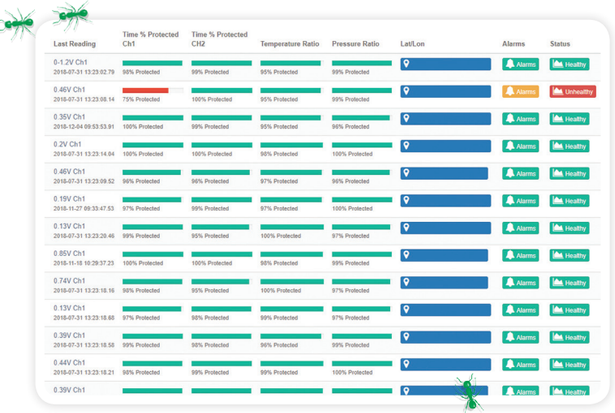
The unit is housed in an IP67 rated housing and is designed with a battery life of five years in the field (depending on the reporting duty cycle). It is possible to extend the battery life with a small solar charger if required.

Data is also stored in non-volatile memory on removable 8Gb SD card which will log over 30 years of recordings as a back-up.

The GreenAmp unit is capable of being configured for High Resolution Recording and Interrupt (HRRI) at specified times to get on and off readings. Contact Anode Engineering for interrupt with relay option.

The standard unit comes as single channel but can be extended to 4 or 8 on request.

We have also incorporated the latest communications protocols within the unit to provide an amount of "future proofing" or ability to expand its capabilities as technology evolves. The protocols include Narrow Band Internet of Things (NBiOT), Sigfox, Wi-Fi, Bluetooth and low energy Bluetooth.



GREENAMP DCD TECHNICAL DATA

Cellular (4G)

- LTE CAT–M1
- NB–IoT

Wi-Fi

- 802.11b/g/n 16mbps

Sigfox

- Class 0 device
- Maximum Tx power: +22dBm
- Node range: Up to 50km

Bluetooth

- Bluetooth Low Energy and Classic

Dimensions

- 130mm x 175mm x 45mm

Power

- (Standard) Rechargeable 3.6V battery pack @ 20.4Ah - JST connector
- 3.6V Non-rechargeable option @ 26Ah - JST connector
- External 5v battery pack– MicroUSB
- Solar Panel- MicroUSB

Storage

- MicroSD card
- Standard with 8GB ≈ 160 million backup messages
- Can be expanded with alternate MicroSD card

Battery life

- 5 years @ 24 records a day with 1 transmit over cellular
- Daisy chain battery life depends on how many links in the chain

Channels

- 1 channel
- 4 or 8 on request
- Digital output with relay on request

Sampling Rates

- Standard 24 records per day
- Standard 1 transmit per day
- Custom recording and transmit rate set remotely (changing sampling rate will affect battery life)
- HRRI sampling 10/sec

Range and resolution

- -3v to 3v Analog Inputs / 1mV Resolution
- Contact Anode for alternate range

Daisy Chain Data

(Patent Pending)

- Range from 3km to over 10km per link depending on conditions
- HRRI mode not available without external power (Solar etc)
- Range can be extended with relay unit/s
- Optional antenna available

Tamper Protection

- Motion alert with accelerometer
- Location tracking with the addition of GPS

Data

- All messages sent through to Anode Engineering's secure cloud database
- Data analysis through Anode Engineering Data Portal
- Rest API in JSON format
- SFTP server with custom format

IP Rating

- HousingIP67

We are excited to hear from you about your specific requirements and look forward to providing the best solution possible for your assets.

Phone: 1800 446 400 | www.anodeengineering.com