# DM12
## WEB BASED DATA LOGGER
## With Control Function

DAN
DATA ACQUISITION NETWORKS

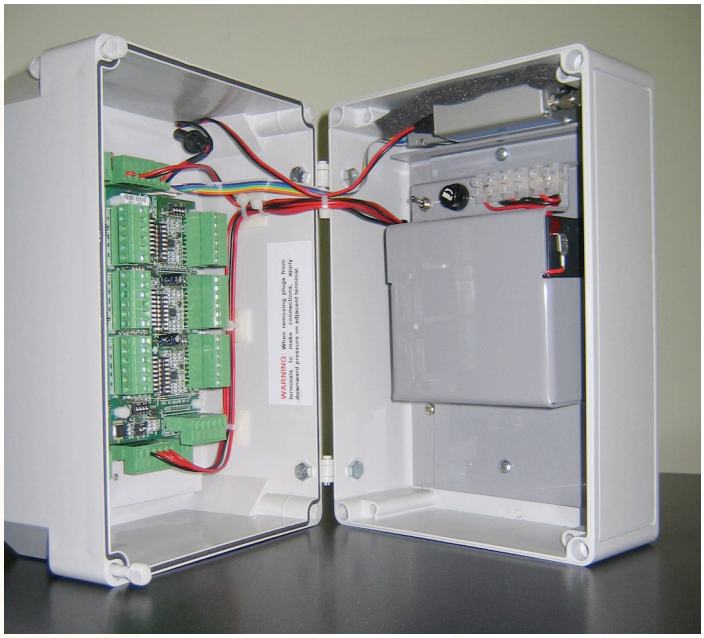
Powerful Web Based
Data Logging Solutions

**The DAN DM12 is the basic monitoring system in the DAN range. It is installed in the field to collect data and transmit that data to the DAN website. Configuration of the DM12 is accomplished by logging into the DAN website and entering the relevant information into the account pages. Note that the account is protected by a group name, user ID and password specific to each user and product.**

**The DM12 has 5 general purpose analogue inputs. Each of the general purpose inputs accept 0 or 4 to 20mA signals from most industrial grade probes. The DM12 unit is able to operate with either loop powered or separately powered probes. Battery voltage can be monitored if required.**

**The DM12 may be upgraded to include 12 additional inputs each of which may be set up to operate in digital, counter or timer mode.**

**The DM12 has two software alarm points associated with each of its inputs. There are 3 relays incorporated to provide local control and alarm action. The relays can be associated with any input or combination of inputs**



***DM12 (with GPRS modem)***

**The DM12 has on board batteries which will allow it typically to operate for 24 to 30 hours without external power. This time is dependent upon the type of transducers connected to the inputs and the duty cycle of the unit. If a dc supply is available at the site, the unit may be recharged by any available source of dc voltage in the range 10 to 50V. If mains power is available, a plug pack with an output in this range can be connected as the means of recharging the batteries. If no power source is available then solar cells can be directly connected and used as the means of recharging the batteries. DAN can supply solar cells and plug packs as part of the implemented solution.**

**The DM12 has an inbuilt GSM/GPRS modem that is used to communicate both data and control signals between the DM12 and the web server via the internet gateway provided by the mobile phone service provider.**

**Data is available by logging onto the DAN web site using password and logon ID. Full access to all the relevant information necessary to set up and run the unit is available. Total control of how much or how little information is displayed on the website can be managed. Data available includes data from the site, alarm messages generated and a log of all changes made to the system including details of the logon ID that made the change.**

**The web site also provides facilities to set local control or alarm parameters, manage passwords and access permissions, input telephone numbers and email addresses for alarm notification and calibration of the inputs.**

**Instantaneous data from the analogue inputs may be obtained form the unit by calling the unit from one of the authorised numbers noted into the web site by the user.**

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## Inputs:

| | |
|---|---|
| Type | 5 X Analogue<br>(Analogue inputs support loop or separately powered probes<br>12 X Digital Inputs |
| Input Ranges:<br>Analogue Current Range | 0 – 20mA/4 – 20mA |
| Digital voltage Available | 12V |
| Analogue input resolution | 10 Bit (>0.1%) |
| Sampling Rate | 19/Second |
| Input Options: | Each digital input may be set to operate in on/off recognition, counter or timer mode |
| Battery Monitoring | Use analogue input 5 to monitor internal battery voltage. |

## Output:

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|---|---|
| Relay Outputs | 3 x SPST N.O. relays with contacts rated 24Vdc @ 5A |

## Field Hardware:

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|---|---|
| Real time clock | Included |
| Internal battery back-up | 2 x 12V sealed lead acid |
| Charging options | 10 to 50V by power pack or solar direct connect facility |
| Housing | IP66 |
| Housing dimensions | 150 x 200 x 100 deep |
| Weight | 3.5Kg |

## Operating Conditions:

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|---|---|
| Operating Temperature | -10°C to +60°C |
| Relative Humidity | 0 – 90% RH non-condensing |
| Temperature Stability | <0.01% of span/°C |
| Long Term Stability | <0.1% of span/10,000 Hrs |
| Power Conservation | May be enabled when solar power used |

## IMPORTANT NOTICE:

**Due to continued product development , specifications may change without notice. Always refer to Data Acquisition Networks for the latest information.**

## Web Based Software:

| | |
|---|---|
| Input Alarm/Control Points | Variable set points/time profiling<br>Variable dead band<br>Variable delay<br>2 Alarms per input<br>SMS option for alarm & reset with user scripted message<br>Note: Battery conservation mode available if input 5 used for monitoring battery voltage |
| Set-up/Change Data Reporting | Set/change variables for any given input |
| Data Report Format | Max, min average for reporting period |
| Instantaneous Data | Logged when requested and available on search |
| Changes Log | All changes made are recorded and available for search |
| Web Retention of Data | Retained for 90 days available in tabulated or graphical form |
| Access Security | Multi level access and data view options – user set |
| Session Time-out | Settable by user |
| Grouping | Units may be grouped for easy log-on |
| Relay Activation | May be linked to alarm/control points |
| Calibration | Set from Web Site |

## Communications:

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|---|---|
| Modem Type | GPRS/GSM approved modem included |
| Communication Method | TCP/IP |
| Period Data Sent | Date & time stamped, maximum, minimum & average for period |

## On Site Software:

| | |
|---|---|
| Alarm Recognition | Immediate for alarms based on input data |
| Reporting Period | Standard variable from 60 mins. (More frequent at additional cost down to 5 Min) |
| Remote Reset | Enabled by specified phone contact |
| Data Accumulation | Up to 200 blocks non reported |
| Instantaneous Data | Enabled by specified phone contact |