

# Text-D4 GSM Logging & Alarm Unit

## Features

- SMS Text Alarm Unit
- Data logger with 1 min - 24 hour log interval
- Logged data automatically sent to your mobile or web server
- 4 inputs, for digital state, or temperature ( -55 to +125°C) or pulse count.
- Power supply 9 - 24v DC
- Optional D type dry cell
- Battery life 5 years with 1 SMS message per week
- Optional daily status message
- Sends alarm SMS messages to up to 10 mobile numbers
- Low battery alarm

## Applications

Logging and alarm for:

- Server room temperature
- Cold stores and freezers
- Refrigerated vehicles
- Pharmaceutical storage
- Water meter - remote logging
- Gas meter - remote logging
- Electricity meter - remote logging
- PV systems - KWH & solar radiation



The Text-D4 is a versatile GSM data logging and alarm unit. It can monitor and log up to 4 pulse, digital state or digital temperature inputs. Logged data such as daily or weekly counter readings, or temperature readings are sent at user programmable intervals via SMS text message to either to the customer's own mobile, or to our M2M data web interface. The Text-D2 can also be used as a stand alone alarm unit, sending SMS text messages if a user programmable alarm threshold has been breached to up to 10 mobile numbers. For remote monitoring of electricity generation or usage the unit can send daily or weekly counter totals with either cumulative or resetting totals

<b>SIM:</b>	Externally accessible via tray.
<b>Antenna</b>	Quad-band GSM stub via SMA connector.
<b>Inputs</b>	4 inputs programmable for temperature, digital state or pulse inputs
<b>Temperature Input</b>	Dallas digital temperature sensor range -55 to +125°C. resolution 0.2°C, accuracy 0.5°C, cable length to suit
<b>Digital Input</b>	Open collector digital state for dry contacts or 0-5v signals
<b>Pulse Input</b>	Pulse counter input, for relay, reed switch or open collector pulses, pulse width 50-250 ms, maximum frequency 5 Hz, totalising or resetting counter.
<b>Battery Type Internal</b>	D type dry cell, min 5 years life with 1 SMS/week or 1 year with 1 SMS/day
<b>Housing</b>	Polystyrene, weatherproof to IP66, dimensions 110x110x66mm
<b>External supply</b>	Optional 9 – 24 Vdc
<b>Power consumption using external 9-24 volt supply</b>	Low power mode ~4mA 'Always On' mode ~30mA average



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# Text-D4 GSM Logging & Alarm Unit

## Programming:

Programmed by text message from any one of the mobiles whose number is stored within the system, or via the optional PC program adapter for use by installer. The system only accepts system commands including programming commands from mobile phones whose number is stored within the system.

## Capacities:

**Mobile Phone Numbers:** The system stores up to 10 mobile phone numbers. Each of the mobile numbers stored within the system will receive the alarm text messages. The mobile number stored in memory location 1, will receive the daily health message.

## Logger message format:

Unit_ID	Date_Time	Log Interval (minutes)	No Channels Logged	Val 1	Val2	Val3	Val4	Val5	Val6	Val7	Val8	Val24
DD8923	24101091530	030	2	238	057	237	059	236	058	235	057	055

Instrument with unit ID DD8923 sends an SMS message on the 24/10/09 at 15:30, logging 2 temperature channels, one ambient, one cold store with readings of around 23.7 degrees and 5.7 degrees respectively. Unit send 24 readings which represents 12 hours of data. Actual text message: DD8923,2410091530,030,2,238,057,237,059,236,058,235,057, .....055

## Typical alarm and status message formats:

Alarm Type	Message Text	Alarm Type	Message Text
High temperature alarm	high (28.1) at Perth server room	Battery health status	Battery OK at Perth server room
Temp back within range	normal (24.9 ) at Perth server room	External power status	External power restored at Perth

## General programming commands

.M01<mobile number> - programs mobile number position 1  
 .M10<mobile number> - programs mobile number position 10  
 .M11<mobile number> - mobile number for daily message  
 .M14<mobile number> - programs mobile number to send data to the web server  
 .Mxx - removes the mobile number from the unit  
 .L<text> - programs the unit with the location name for text messages  
 .G<text> - program the daily message text  
 .E<DDMMYYhhmm> - sets the daily message time  
 .U<text> - sets the unit ID ( must be an integer )  
 .cz - turns off the SMS message counter  
 .E<DDMMYYhhmm> - sets the clock time  
 .T3<hhmm> - sets the time of day for the daily health message

## Channel Setup Commands

.IxT<text >#<text>#<text> - set channel 1 for temperature input with high, low and normal text messages  
 .Jx<low temp>#<high temp>#<hyst> - set the low and high temperature thresholds with hysteresis  
 .Rx - set the input channel as a resetting counter  
 .Lx - set the input channel as a totalising counter  
 .IxC<text> - set the input channel for a normally closed contact ( text is included in notification SMS on change of state )  
 .IxO<text> - set the input channel for a normally open contact  
 .TL<log rate>#<wake interval><y/n> - programs the sample rate interval for data logging, the unit wake time, and tells the unit to send logged data at the time set for the daily health message. Example .TL15#60#Y sets the unit to log every 15 minutes, wake up and sample the input channels every 60 seconds and activates the option to send logged data once per day at the daily health message time ( .T3 )

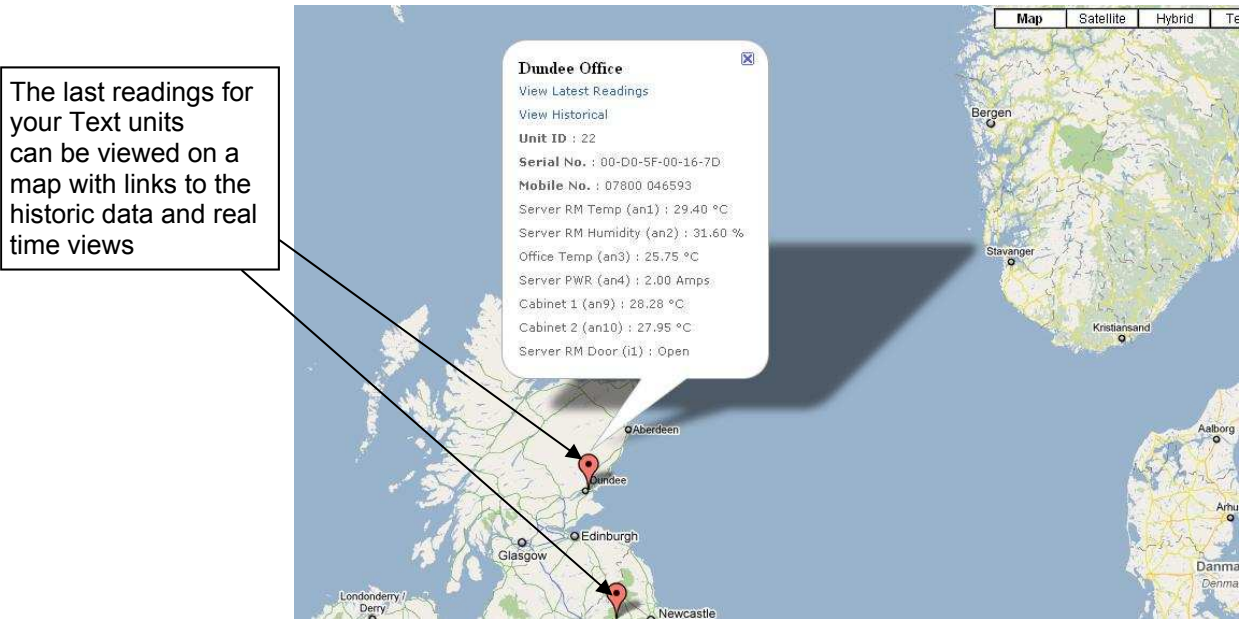
## Status commands:

.S? - General status request  
 .M? - List the mobile numbers  
 .N? - Display power mode  
 .I? - Display inputs and configuration text  
 .V? - Serial number and firmware version  
 .L? - Display location name  
 .J? - Display alarm settings

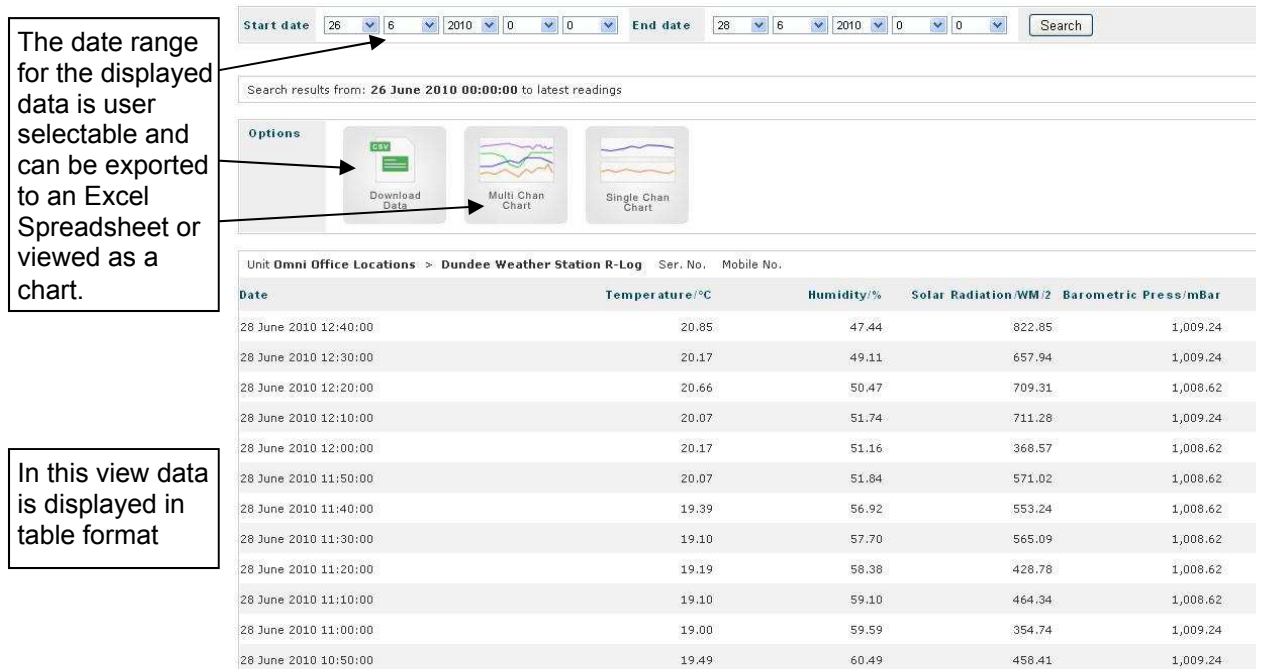
# Text-D4 GSM Logging & Alarm Unit

Data from the Text-D4 can also be viewed on a web browser in chart and table format, and downloaded as a CSV file. Each organisation is assigned a unique username and password allowing them to see only their Text-D4 units. The browser interface is very simple to implement and is available at a small monthly cost per unit to Text-D4 users.

## Web Interface - Map View

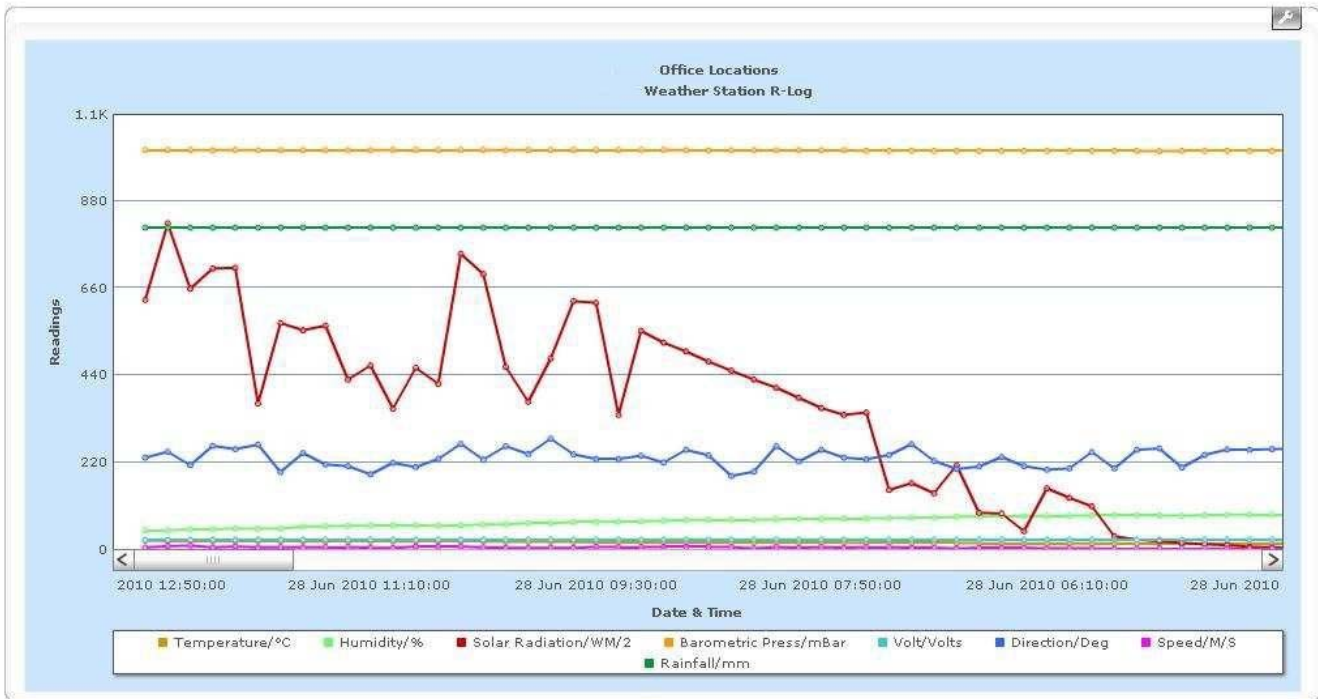


## Web Interface - Historical Data View



# Text-D4 GSM Logging & Alarm Unit

Web Interface - Chart View



Each chart can be edited for size, number of data points shown, date range etc. Charts can be printed or exports as .jpg images or .pdf documents

The latest readings display provides a simple control panel which give an at a glance view of the latest readings of individual or groups of remote units.

Values which are in an alarm condition are displayed with a red background.

In admin mode alarm levels, scaling and labels can be edited via clicking the settings or spanner icon.

<b>Unit ID :</b> 202 <b>Serial No. :</b> <b>Mobile Number :</b> <b>Location :</b> California Office <a href="#">View History</a> <a href="#">Mimic panel</a>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">0.00 MPH Windspeed (an1)</div> <div style="text-align: center;">15.64 W/m2 Solar Radiation (an2)</div> <div style="text-align: center;">62.60 %RH Humidity (an3)</div> <div style="text-align: center;">73.11 °F Temperature (an4)</div> </div>
<b>Unit ID :</b> 22 <b>Serial No. :</b> <b>Mobile Number :</b> <b>Location :</b> Dundee Office GRD <a href="#">View History</a> <a href="#">Mimic panel</a>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">20.40 °C Server RM Temp (an1)</div> <div style="text-align: center;">55.70 % Server RM Humidity (an2)</div> <div style="text-align: center;">26.75 °C Office Temp (an3)</div> <div style="text-align: center;">2.20 Amps Server PWR (an4)</div> </div>
<b>Unit ID :</b> 9004 <b>Serial No. :</b> <b>Mobile Number :</b> <b>Location :</b> Weather Station R-Log <a href="#">View History</a> <a href="#">Mimic panel</a>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">20.07 °C Temperature (an1)</div> <div style="text-align: center;">51.74 % Humidity (an2)</div> <div style="text-align: center;">711.28 W/M2 Solar Radiation (an3)</div> <div style="text-align: center;">1,009.24 mBar Barometric Press (an4)</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">6.39 M/S Speed (an9)</div> <div style="text-align: center;">812.51 mm Rainfall (an13)</div> </div>
<b>Unit ID :</b> 801 <b>Serial No. :</b> 000001D507DQ <b>Mobile Number :</b> <b>Location :</b> Text TDP4 Test Unit <a href="#">View History</a> <a href="#">Mimic panel</a>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">18.73 °C Outside Air Temperature (an1)</div> <div style="text-align: center;">21.04 °C BLR RM Air Temp (an2)</div> <div style="text-align: center;">21.40 °C BLR O/P Water temp (an3)</div> </div>



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