

OmniText-AD4 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, pulse counting or temperature (-55 to +125°C).
- 4 analogue inputs 4-20mA, 0-10vDC
- Power supply 9 - 18v DC
- Rechargeable battery
- Internal solar regulator allows direct connection to a solar panel for long term operation
- Sends daily/weekly 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
- Electricity meter - remote logging
- PV systems - KWH & solar radiation

SIM:	Externally accessible via tray.
Antenna	Quad-band GSM stub via SMA connector.
Inputs	4 inputs programmable for temperature, digital state or pulse inputs 4 selectable inputs 0 to 50mV, 100mV, 200mV, 500mV, 1V, 2V, 5V, 10V)
Temperature Input	Dallas digital temperature sensor range . 55 to +125°C. resolution 0.2°C, accuracy 0.5°C, cable length to suit
Digital Input	Open collector digital state for dry contacts or 0-5v signals
Pulse Input	Pulse counter input, for relay, reed switch or TTL level pulses, pulse width 50-250mV, max 5Hz, totalising or resetting counter.
Analogue Input	0-10vDC input with 12 bit resolution.
Battery Type Internal	Rechargeable lithium-ion
External supply	9 . 18vDC or direct from a solar panel
Current from 12 volt supply	Low power mode ~4mA Always On mode ~30mA average

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Programming:

Programmed by text message from any one of the mobiles whose number is stored within the system. 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	2410141530	030	2	238	057	237	059	236	058	235	057	055

Instrument with unit ID DD8923 sends an SMS message on the 24/10/14 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: DD8923,2410141530,030,2,238,057,237,059,236,058,235,057, 0 0 ...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 ch1 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



Measurement and data acquisition solutions

UK / Europe Office

Tel: +44 845 9000 601
 Fax: +44 845 9000 602
 info@omni.uk.com
 www.omniinstruments.co.uk

Australian Office

Tel: +61 282 442 363
 Fax: +61 294 751 278
 info@omniinstruments.com.au
 www.omniinstruments.com.au

USA / Canada Office

Tel: +1 866 849 3441
 Fax: +1 866 625 8055
 info@omniinstruments.net
 www.omniinstruments.net

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Tel: +44 845 9000 601
Fax: +44 845 9000 602
info@omni.uk.com
www.omniinstruments.co.uk

Australian Office

Tel: +61 282 442 363
Fax: +61 294 751 278
info@omniinstruments.com.au
www.omniinstruments.com.au

USA / Canada Office

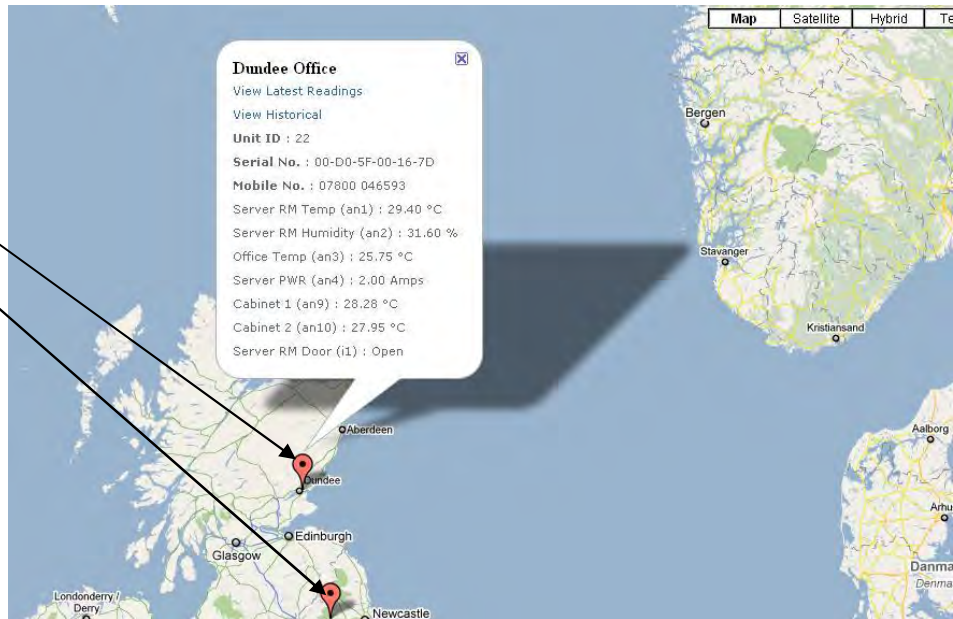
Tel: +1 866 849 3441
Fax: +1 866 625 8055
info@omniinstruments.net
www.omniinstruments.net

OmniText-AD4 GSM Logging & Alarm Unit

Data from the OmniText-AD4 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 OmniText-AD4 units. The browser interface is very simple to implement and is available at a small monthly cost per unit to OmniText-AD4 users.

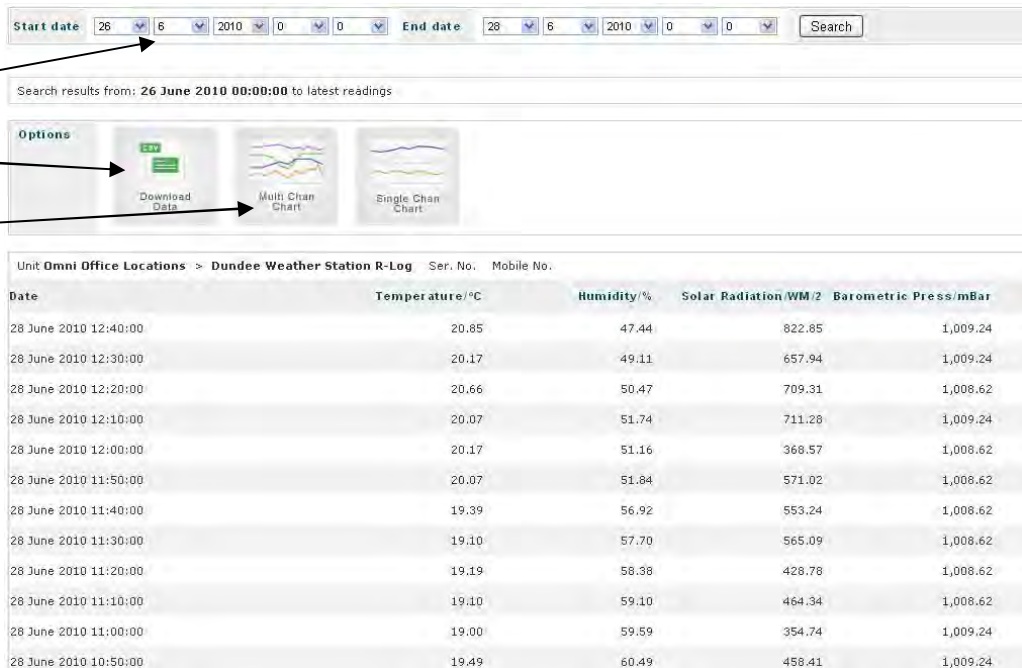
Web Interface - Map View

The last readings for your OmniText units can be viewed on a map with links to the historic data and real time views



Web Interface - Historical Data View

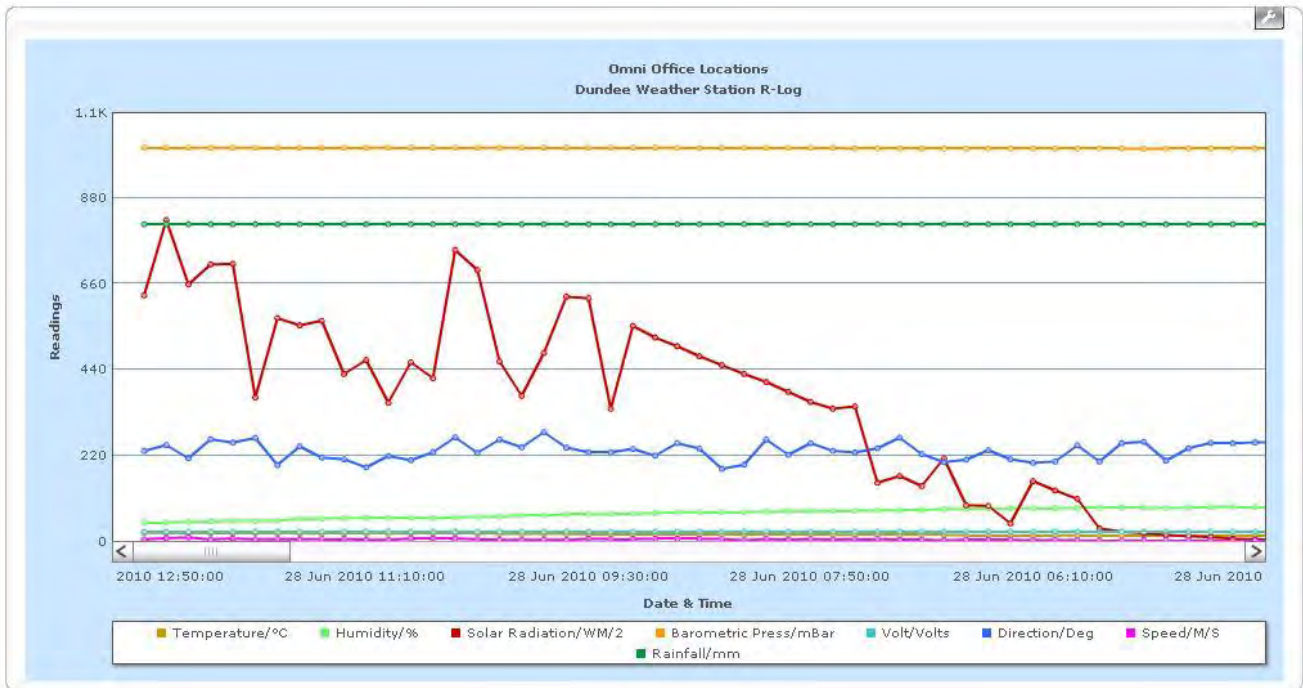
The date range for the displayed data is user selectable and can be downloaded to a CSV file and viewed in Excel



In this view data is displayed in table format

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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 the settings (spanner) icon.

Unit ID : 202 Serial No. : Mobile Number : Location : California Office View History Mimic panel	0.00 MPH Windspeed (an1)	15.64 W/m ² Solar Radiation (an2)	62.60 %RH Humidity (an3)	73.11 °F Temperature (an4)
Unit ID : 22 Serial No. : 00-D0-SF-00-16-7D Mobile Number : 07800 046593 Location : Dundee Office GRD View History Mimic panel	20.40 °C Server RM Temp (an1)	55.70 % Server RM Humidity (an2)	26.75 °C Office Temp (an3)	2.20 Amps Server PWR (an4)
Unit ID : 9004 Serial No. : Mobile Number : Location : Dundee Weather Station R-Log View History Mimic panel	20.07 °C Temperature (an1)	51.74 % Humidity (an2)	711.28 W/M/2 Solar Radiation (an3)	1,009.24 mBar Barometric Press (an4)
	6.39 M/S Speed (an5)	812.51 mm Rainfall (an13)	1.00 Server RM Door (i1)	
Unit ID : 801 Serial No. : 000001D507D0 Mobile Number : 07975104033 Location : OmniText TDP4 Test Unit View History Mimic panel	18.73 °C Outside Air Temperature (an1)	21.04 °C BLR RM Air Temp (an2)	21.40 °C BLR OP Water temp (an3)	