

LogMessage

ProfiSignal

NEW

ADVANCED data logger for universal applications



LogMessage – the custom-made, stand

Stand alone operation

LogMessage is a stand alone operating device for acquiring, monitoring, calculating and logging measurement data. It is equipped with a 1 GB memory for logging up to 128 million measurement values.

Universal applications

The LogMessage's analog inputs are differentially and galvanically isolated from each other as well as from the power supply. Earth loops and non-isolated sensors therefore present no problem. All analog inputs can be used universally and are capable of measuring any type of thermocouple, RTD, voltage or current signal. Channel configuration takes place via the easy to use DataService Configurator software included with the delivery.

Various interfaces

Once configured, LogMessage can operate stand alone and requires no PC support. Configuration and data read-out takes place via a network interface. LogMessage's two serial ports enable connection of a modem for remote access, or for other hardware to be connected for data transfer purposes. Alarm notifications and text messages may also be transmitted using a GSM modem. By operating the LogMessage device within a network, measurement data can be transmitted online and processed using the ProfiSignal Go software.

A complete system including software

LogMessage devices are supplied with the powerful ProfiSignal Go software. ProfiSignal Go is a professional PC software for the online and offline monitoring and analysis of measurement data. If you already use other measurement technology software, the full service package includes LabVIEW™ and DASyLab™ drivers, Modbus TCP and OPC Server.

LogMessage



ProfiSignal Go



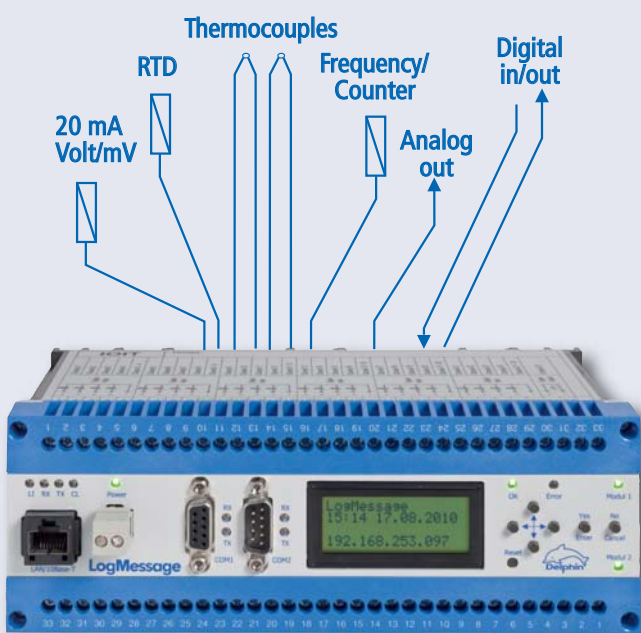
User benefits

- ProfiSignal Go software included in package
- LAN interface for data transfer
- Differential and galvanic isolation of inputs
- Integrated signal conditioning
- 1 GB internal memory for 128 million data records
- 2 configurable serial ports
- Protocols: Modbus RTU and TCP, separate protocols
- A range of internal calculation and logic channels
- Monitoring and alarm functions
- Drivers: OCX, OPC, LabVIEW™, DASyLab™, dot.net
- Web Server interface

alone data logger

Versions

LogMessage is available in seven versions that differ according to the number of inputs and outputs. The type 100 is equipped with 15 analog inputs and a sampling rate of up to 600 measurements per second. The type 300 is equipped with an additional 24 synchronous digital inputs making it ideal for the fault analysis of digital events.



Various Applications


- Stand alone, universal data logging
- Temperature measurement
- Remote data transfer via GSM / UMTS
- Tests and trials
- Product testing and quality assurance
- Process monitoring and alarm functions
- Process data acquisition
- Fault analysis with recorder functions
- Laboratory data acquisition and management
- GPS logging
- Facility monitoring
- Status and event logging
- Energy consumption acquisition and measurement

Model Type	LogMessage						
	LM100	LM200	LM300	LM400	LM500	LM600	LM700
Analog inputs (mV, mA, thermocouple)	15		15	15		15	30
Analog inputs (mV, mA, thermocouple, RTD)		10			16	10	
Analog outputs (mA)		1				1	
Digital inputs (counter)		12 (11)	24	1			
Digital outputs		17	1	24		1	
Sampling rate in Hz	600	600	600	600	120	1200	1200

LogMessage versions

Software channels

LogMessage is equipped with a range of internal calculation, monitoring and logic functions that are set up as *virtual channels*. These virtual channels process online measurement data and make it available for visualization, storage or control purposes. Whole program sequences can be configured into the device, simply and intuitively using control functions. These then run independently and require no PC support.

Icon	Function	Description
	Average	Min, max, moving, time-based, ...
	Calculation channel	Trigonometry, +, -, *, root, power, ...
	Markers	Markers
	Integrator	Integrator, edge counter, stop clock, ...
	Differentiator	Slope calculations
	Set point	Set point curves
	PID controller	P, PI, and PID controller
	Linearization	Linearization tables
	Strain gauge rosette	Calculation from δ and ϕ
	Limit value	Monitoring, wire breaks, watchdog, ...
	Logic	NOT, AND, OR, NOR, EXOR, ...
	FlipFlop	Type D, J-K, S-R
	Timer	Alarm, signal generator, PWM, ...
	Event	Email, text message via GSM/UMTS router
	X-Message	Direct connection between 2 devices
	ModBus (LAN)	Modbus TCP connection



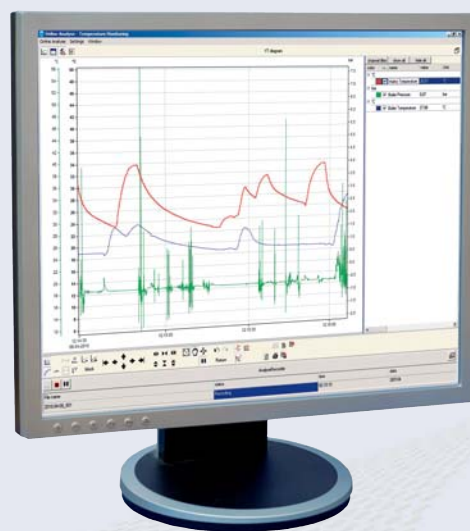
Example:

An integrator channel accumulates energy figures, volume flows or consumption figures. By using a limit value channel, permanent monitoring can be performed with an event being triggered when the limit is over-run or under-run. A digital output can then be activated or an alarm sent by email.

ProfiSignal Go

Online and offline analysis and trends

ProfiSignal Go records measurement data, displays the data as trends, analyses the data and exports the data. Trends can be observed online and at the same time historical data evaluated. Set-up is very simple. To go from sensor connection to trend output takes just a few mouse clicks. ProfiSignal Go is supplied free of charge with each LogMessage device.



A trend portrayal in ProfiSignal Go

Alarm management

As well as trend functions, ProfiSignal Go also provides alarm management. A global alarm list simply and clearly portrays alarm notifications in tabular form. Alarm settings for the monitoring of over-runs, under-runs, process violations, status outcomes etc. are configured using the DataService / Configurator software. Other actions may also be performed, e.g. emailing, text messaging or digital output triggering.

Overview of technical specifications

General technical information		LogMessage
Weight		1 kg
Dimensions		200 x 73 x 118 mm
Material		plastic enclosure
Humidity		80%, non-condensing
Temperature range		-20 .. 60 °C
Supply		12 - 36 VDC + VAC external
Power input		max. 10 W
Mounting		DIN rails or screw fixings
LAN interface		10 Base-T (half Duplex) / TCP/IP, UDP, ICMP
Data storage		
Size		1 GB
Measurement values		up to 128 millions
Analog inputs		
Resolution		24 bit
Current		0 .. 20 mA, 4 .. 20 mA
External shunt required		10 Ω, 50 Ω, 100 Ω, 125 Ω, 250Ω, 500Ω
Voltage		±156 mV, ±312,5 mV, ±625 mV, ±1,25 V, ±2,5 V, ±5 V, ±10 V
RTD as 2, 3, 4 wired		Pt50, Pt100, Pt250, Pt500, Pt1000, Pt5000
Thermistor		YSI400
Thermocouple		Types K,E,N,L,J,S,U,R,T,B,C
Resistance measurement		0 .. 10 kΩ
Galvanic isolation		750 VDC to system and supply 400 VAC between channels for LogM 500
Withstanding voltage		110 VDC max
Input resistance		> 1 GΩ (10 MΩ LogM500)
Precision		
Thermocouples		0,1 % from measurement range to compensation
V / mA		0,01 % from measurement range
Pt100 / Pt1000		0,1 K / 0,01 K
Analog outputs		
Current		0 .. 20 mA, 4 .. 20 mA
External shunt		max. 700 Ω
Resolution		16 bit
Precision		0,05 %
Galvanic isolation		750 VDC to system and supply
Digital input		
TTL low level		0 .. 1,5 V @ 0 .. 1,5 mA
TTL high level		3 .. 90 V @ 2 mA
Refresh rate		1 kHz
Galvanic isolation		2,5 kV between channels
Digital inputs (counters)		
TTL low level		0 .. 1,5 V @ 0 .. 1,5 mA
TTL high level		3 .. 90 V @ 2 mA
Frequency		max. 30 kHz
Counter		16 bit (0 .. 65535)
Gate time		1 .. 6.000 ms (1ms steps)
Precision		
Range 0 .. 1 kHz		1 Hz
Range 1 .. 10 kHz		5 Hz
Range 10 .. 30 kHz		10 Hz
Digital outputs		
Switching voltage		50 VDC max
Switching current		2,5 ADC max
Inverse diode		integrated

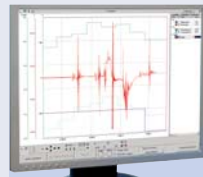
Delphin – Product range

Technology



Expert Series

Instrumentation & control



ProfiSignalGo

Measurement, evaluation



Message Series

Instrumentation & control,
recording, monitoring



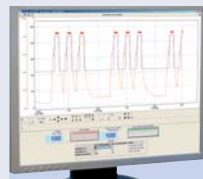
ProfiSignalBasic

Measurement, evaluation,
monitoring, operation, observation



Laboratory devices

For tests, research and
development



ProfiSignalKlicks

Measurement, evaluation, monitoring,
operation, observation, automation,
parameter / recipe input, reports



Control cabinets

For industrial applications



Services

Project planning, application develop-
ment, installation, calibration, service
hotline, training and more



Mobile measurement case

Field trials, servicing



ISO 9001
certified



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