



PORTABLE DATA LOGGING SYSTEMS

for Professionals

MultiCon MultiLog



Measure,
Control and Log Data



Introduction

SIMEX is a Polish manufacturer and supplier of industrial automation equipment. The company has been in the market for nearly 30 years and offers services provided by a team of young and qualified professionals, both designers and programmers, as well as sales representatives.

We specialise in the production of devices from the following categories: counters, indicators, controllers while concentrating on data recorders. In the offer you will find two families of high quality products for data recording: MultiCon and a series for the less advanced processes - MultiLog. Both devices are designed for stationary measurements.

What's new is the portable case for these products, which allows transporting them from place to place. This is a significant advantage, because stationary recorders gain features of portable recorders and at the same time retain the capabilities for advanced measurement and recording of the tested media. In addition, the sealed case made by PELI™ protects the devices from damage.

Applications

- Recording the operating parameters in water and sewage pumping stations
- Recording the operating parameters in heat chambers and heat exchange units
- Pressure control of hydrophore stations
- Recording changes in river levels

Mine



Pump station



Military



Water treatment plant



Extreme conditions



Hydrophore station



Heat exchange unit



Sewage treatment plant

Portable case - the advantages

Protection of electronic equipment and valuable recorded data is a growing concern. This is particularly important in non-stationary solutions, when measuring instruments are mounted in portable, sealed transport cases, which are the only barrier against the harsh environmental conditions. Therefore, this case must meet a number of requirements guaranteeing the safety of the devices installed in it, and hence the reliability of this type of data recorders. In the sets offered by our company we use PELI™ cases, which is a proven and reliable solution in the transport and storage of sensitive measuring instruments for professionals.

Portable case P150: 464 x 366 x 176 mm

Technological holes allow for lock or seal set up to increase safety in the event of data theft attempts.

Extra thick 5.3 mm wall construction provides significantly greater strength to weight ratio over conventional injection moulding.

Big-fold down and rubberized handles are strong, comfortable and ergonomic

The neoprene o-ring keeps the case watertight.

Heavy duty „fins“ are engineered to protect latch and hinge areas.

Automatic pressure equalization valve releases air from the interior while keeping water molecules out, ensuring IP 65 protection class.

The double-step latches are smart and make the case easier to open.



Portable case P1 30: 285 x 246 x 174 mm

Heavy duty „fins“ are engineered to protect latch and hinge areas.

The double-step latches are smart and make the case easier to open.

Technological holes allow for lock or seal set up to increase safety in the event of data theft attempts.

The neoprene o-ring keeps the case watertight.

Big-fold down and rubberized handles.

Stainless steel pins are used in hinges, latches and handles to prevent corrosion.

Automatic pressure equalization valve releases air from the interior while keeping water molecules out, ensuring IP 65 protection class.

Twin-ribbed top surface.

Extra thick 5.3 mm wall construction provides significantly greater strength to weight ratio over conventional injection moulding.

Ultra High Impact Copolymer Polypropylene is extremely strong and flexible against external impacts.

MultiCon

P130-CMC-99 / CMC-141
P150-CMC-99 / CMC-141

- P130: up to 23 input/output/communication connectors
- P150: up to 41 input/output/communication connectors
- colour display with touchscreen, TFT 3.5" or 5.7"
- RS-485 or Ethernet communication
- tight IP 65 case

MultiCon in a portable case is a combination of a multichannel controller / data recorder with a sealed waterproof and dustproof housing. This combination gives you the ability to safely perform measurements and record data in particularly demanding and difficult applications, for example, in field conditions with high dust, high humidity or high risk of flooding the device.



P130



Portable version of MultiCon line data recorder works wherever there is no need or possibility to install stationary devices. Portable case is equipped with all necessary connectors with IP 65 protection degree for connection of sensors, allowing for autonomous operation of the recorder under harsh environmental conditions. By equipping the case with communication interfaces: Ethernet and/or RS-485, the MultiCon can provide measurement data to a PC or a host system.

The main advantages:

- USB Host port for retrieving data,
- waterproof and dustproof housing, designed to work in conditions of high humidity, high temperature jumps, dust, pressure differences, etc.
- free data analyze software.

SET CONTENTS

- portable case P130 or P150,
- MultiCon CMC-99 or CMC-141 controller/data recorder,
- power cable,
- connectors (socket-plug) for sensors and communication links in the ordered amount.

Optionally:

- DAQ Manager Software CD Box,
- LKS-99/141 licence key for data logging,
- MF-16 (16 GB) mini pendrive USB.

P150



ACCESSORIES



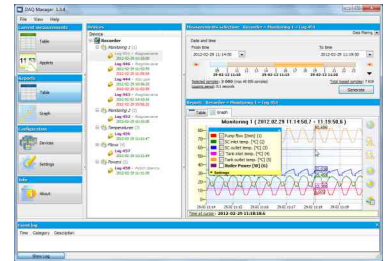
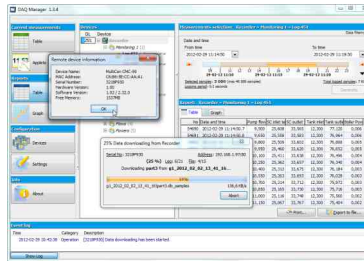
MF-16: the mini USB memory stick is an incredibly small and stylish flash drive offering 16 GB data storage, ideal for transporting data, and fits inside the optional lockable door STD-99/141.

TECHNICAL DATA

	CMC-99 in portable case	CMC-141 in portable case
Power supply	19V ÷ 50V DC, 16V ÷ 35V AC or 85V ÷ 260V AC/DC, 50-60Hz	19V ÷ 50V DC, 16V ÷ 35V AC or 85V ÷ 260V AC/DC, 50-60Hz
Inputs / outputs type	up to 23 or 41 input/output connectors: universal, analogue (0/4 ÷ 20mA, 0/1 ÷ 5V, 0/2 ÷ 10V), thermocouple (J, K, S, T, N, R, B, E, L, ± 25 mV, ± 100 mV, -10 ÷ 25 mV, -10 ÷ 100 mV), resistance (Pt100, Pt500, Pt1000, Pt'50, Pt'100, Pt'500, Ni100, Ni500, Ni1000, Cu50, Cu100, Cu'50, Cu'100, 0 ÷ 300 , 0 ÷ 3k), counter/ flowmeter/ ratemeter, digital	up to 23 or 41 input/output connectors: universal, analogue (0/4 ÷ 20mA, 0/1 ÷ 5V, 0/2 ÷ 10V), thermocouple (J, K, S, T, N, R, B, E, L, ± 25 mV, ± 100 mV, -10 ÷ 25 mV, -10 ÷ 100 mV), resistance (Pt100, Pt500, Pt1000, Pt'50, Pt'100, Pt'500, Ni100, Ni500, Ni1000, Cu50, Cu100, Cu'50, Cu'100, 0 ÷ 300 , 0 ÷ 3k), counter/ flowmeter/ ratemeter, digital
Sensor supply output	24V DC ±5% / typically 200mA	24V DC ±5% / typically 200mA
Communication interfaces	options: RS-485, Modbus RTU, 1200 ÷ 115200 bit/sec., Ethernet	options: RS-485, Modbus RTU, 1200 ÷ 115200 bit/sec., Ethernet
Display	TFT 3.5"; colour, graphic TFT, 320x 240 pixels, with touchscreen	TFT 5.7"; colour, graphic TFT, 320x 240 pixels, with touchscreen
Memory capacity Data recording speed	internal 1,5 GB or 3,5 GB from 0.1 s to 24 h with resolution 0.1 s	internal 1,5 GB or 3,5 GB from 0.1 s to 24 h with resolution 0.1 s
Protection class	IP 65	IP 65
Operating temperature	0°C ÷ +50°C (optional -20°C ÷ +50°C)	0°C ÷ +50°C (optional -20°C ÷ +50°C)
Weight	ca. 2.5 kg (with P130 case), ca. 4 kg (with P150 case), depending on equipment	ca. 2.5 kg (with P130 case), ca. 4 kg (with P150 case), depending on equipment
Dimensions	portable case P130: 285 x 246 x 174 mm portable case P150: 464 x 366 x 176 mm MultiCon CMC-99: 96 x 96 x 100 mm	portable case P130: 285 x 246 x 174 mm portable case P150: 464 x 366 x 176 mm MultiCon CMC-141: 144 x 144 x 100 mm

SOFTWARE

DAQ Manager software is used for service of MultiCon data loggers. The software allows to visualize recorded data in the form of graphs and tables, group measurement results, create reports and export data into other files.



ORDERING

version: _____
 99A : 3.5" display, case with a compartment for accessories/sensors, 11 input/output/communication connectors max., mounted on the right side of the case
 99B : 3.5" display, case without a compartment for accessories/sensors, 41 input/output/communication connectors max.
 141A : 5.7" display, case with a compartment for accessories/sensors, 41 input/output/communication connectors max. (not available for P130)
 141B : 5.7" display, case without a compartment for accessories/sensors, 41 input/output/communication connectors max.

number of connectors: _____
 1.
 2.
 ...
 23 (P130)
 41 (P150)

Ethernet port: _____
 0: none
 4: RJ45

power supply: _____
 3: 24V AC/DC
 4: 85V - 260V AC/DC

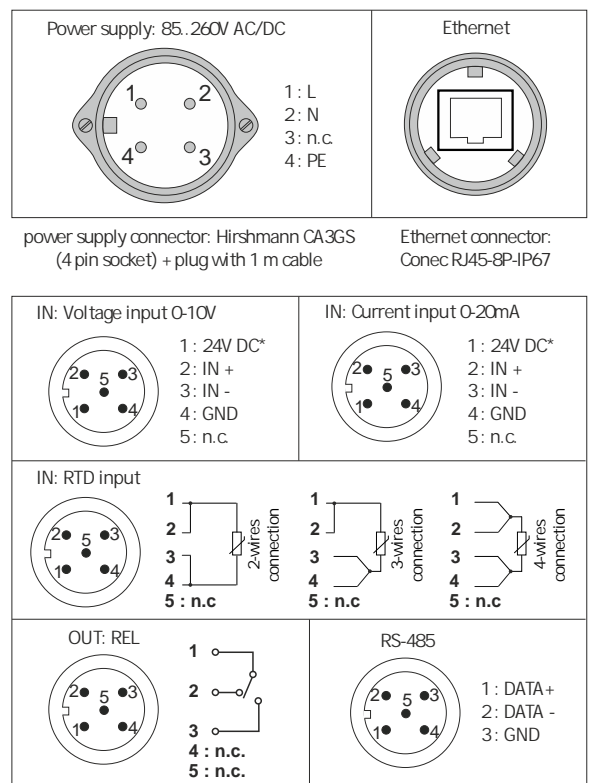
P130-CMC-XXX-XX-X-X
 P150-CMC-XXX-XX-X-X

* - full order code for the MultiCon CMC-99/141 should also be provided

Ordering example:

P130-CMC-99A-5-1-4 with CMC-99-PS42/ETU/E/E/RT4-0B1
 P150-CMC-141B-36-0-4 with CMC-141-PS42/E/124/E/R121-0B1

EXAMPLARY PIN ASSIGNMENT



I/O connectors: Hirshmann EF12M5 (5 pin socket) + plug

MultiLog

P130-SRD-99
P150-SRD-99

- P130: up to 11 input/output/communication connectors
- P150: up to 13 input/output/communication connectors
- LCD 2.9" monochrome display
- USB Host port for flash data storage
- 2 electronic relay outputs optional



P130

The portable MultiLog SRD-99 data recorder set in a portable case is designed to record, display current or average values and present data in the form of trend graphs of various technological parameters. The set may be equipped with 1 to 8 measuring inputs: 0/4-20 mA or Pt 100/500/1000 and, optionally, 2 relay outputs. The primary function of the outputs is signalling alarm states but the configuration menu also allows to use them in a variety of control systems. Each of the outputs can be controlled by a single channel or group of measurement channels with individually adjustable thresholds. The recorder was placed in a high quality transport case. High impact, dustproof and waterproof case housing allows to use the set virtually in any environmental conditions.

The main advantages

- USB Host port to retrieve and store the data in flash memory (as standard, front or rear),
- waterproof and dustproof case housing, designed to work in conditions of high humidity, high temperature jumps, dust, pressure differences, etc.,
- 8 MB data memory,
- free configuration and recording software.



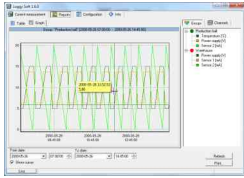
P150

ACCESSORIES



MF-16: the mini USB memory stick is an incredibly small and stylish flash drive offering 16 GB data storage, ideal for transporting data, and fits inside the optional lockable door STD-99/141.

SOFTWARE



The Loggy Soft enables the visualization, archiving and printing of measurements (e.g. temperature, humidity, pressure) stored in MultiLog device memory.



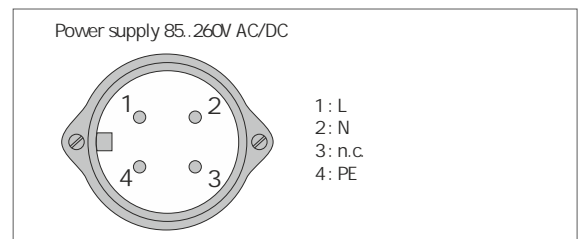
The S-Toolkit enables configuration reading and writing operations, updating the device firmware and obtaining basic information on MultiLog series devices through RS-485 serial interface or flash-disk devices plugged into USB port.



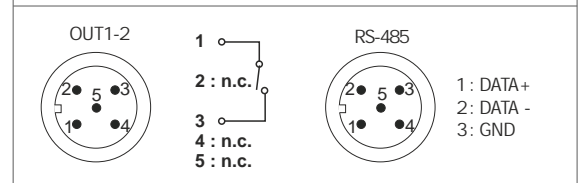
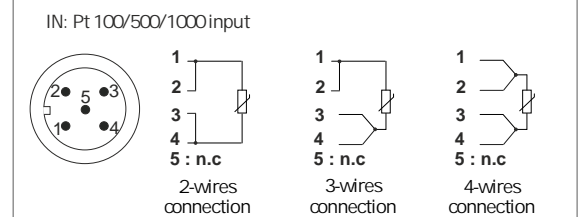
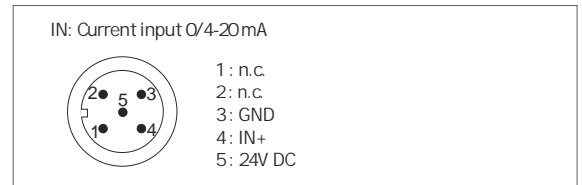
TECHNICAL DATA

	SRD-99 in portable case
Power supply	19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC
Measuring inputs Digital input	1, 4 or 8 measuring inputs 1 digital input, 10-30V DC
Measuring range	0/4-20 mA; 0/1-5V, 0/2-10V; TC (K, S, J, T, N, R, B, E); Pt100 / Pt500 / Pt1000 (4-wires); 0-60 mV, 0-75 mV, 0-100 mV, 0-150 mV
Outputs Sensor supply output	2 electronic relays (ER1, ER2), 24VAC (35VDC)/200 mA 24V DC / max. 200 mA, not separated
Communication interface	RS-485, Modbus RTU, 1200 ÷ 115200 bit/sec.; USB PC port and USB Host port (front or rear)
Display	2.9" LCD, graphic, 128 x 64 points, with backlight (amber or white)
Memory capacity	8 MB internal (up to 3 000 000 data records)
Protection class	IP 65
Operating temperature	0°C ÷ +50°C (standard), -20°C ÷ +50°C (option)
Weight	ca. 2.5 kg (with P130 case), ca. 4 kg (with P150 case), depending on equipment
Materials	body: Polypropylene latch: ABS lid O-Ring: Polymer pins: Stainless Steel
Dimensions	portable case P130: 285 x 246 x 174 mm portable case P150: 464 x 366 x 176 mm MultiLog SRD-99: 96 x 96 x 100 mm

EXAMPLARY PIN ASSIGNMENT



power supply connector: Hirshmann CA3GS (4 pin socket)
+ plug with 1 m cable



I/O connectors: Hirshmann EF12M5 (5 pin socket) + plug

SET CONTENTS

- portable case: P130 or P150,
- MultiLog SRD-99 data logger,
- power cable,
- connectors (socket-plug) for sensors
and communication links in the ordered amount,
- compartment for accessories/sensors,
- CD-ROM with software and manuals.

Optionally:

- SRS-U4A-081
- MF-16 (16 GB) mini pendrive USB

ORDERING

P130-SRD-99X-XX-0-X^{*}
P150-SRD-99X-XX-0-X^{*}

number of connectors: 1, 2, ..., 11 (P130), 13 (P150)

power supply: 3: 24V AC/DC, 4: 85V - 260V AC/DC

* - full order code for the MultiLog SRD-99 should also be provided

Ordering example:

P130-SRD-99W-4-0-4 with SRD-99W-4T28-51-4-0B1



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