

MRL-8

Data logger



The MRL-8 is a compact data logger designed to acquire, process, store and transmit environmental data. Its waterproof housing, integrated modem and charger make the MRL-8 ideal for remote and autonomous monitoring applications. The MRL-8 is compatible with all sensors offered by Sommer Messtechnik and third-party devices equipped with analog or SDI-12 interface options.

Versions

Art	Version
21927	MRL-8 data logger with integrated 4G modem (Europe), solar charger
22015	MRL-8B data logger with integrated 4G modem (Europe), solar charger, 6 Ah lead-acid battery
20062	MRL-8E data logger with integrated Ethernet and 4G modem (Europe), solar charger
22023	MRL-8P data logger with integrated Ethernet and 4G modem (Europe), third-party protocol, solar charger
22142	MRL-8 data logger with integrated 4G modem (North America), solar charger
22143	MRL-8B data logger with integrated 4G modem (North America), solar charger, 6 Ah lead-acid battery
22141	MRL-8E data logger with integrated Ethernet and 4G modem (North America), solar charger
22144	MRL-8P data logger with integrated Ethernet and 4G modem (North America), third-party protocol, solar charger

Scope of delivery

Qty.	Name
1	MRL-8 in the required configuration
1	Manual and Commander Software on USB stick
3	Blanking plug for unused cable glands

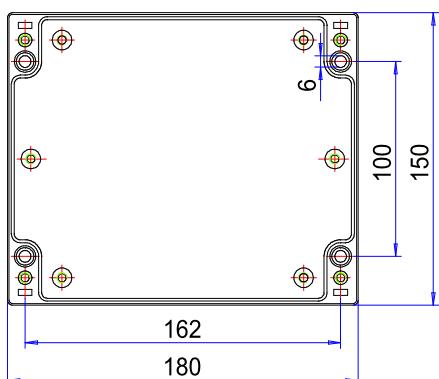
Accessories

Art	Accessory
20181	RS-232 to USB converter cable with push-pull connector, 1.8 m
21118	Antenna for MRL-8 and DCM-3 with 2.5m cable for 2G / 3G / 4G / Bluetooth / WiFi 2.4, with SMA / M connector
20595	SOMCAM-2W
20436	Blanking plug for unused cable glands
20434	Internal connector set

Specifications

Device specifications	
Power supply	9...28 VDC; Overvoltage and reverse voltage protection Solar panel supply: max. 40 W/12 V
Power consumption	Active: <23 mA @12V Standby: <0.6 mA @ 12V @ Terminal X1
Sensor supply	100 mA @ 5V 200 mA @ 12V 1x 1.10 A and 3 x 0.50 A @ switched supply voltage (max. 2 A in total)
Inputs	4x Analog 0...2.5 V, 16 bit (3 single ended, 1 differential) 2x Counter (one optionally as encoder) 1x Wind speed 1x Wind direction 1x RS-485 (sensor or camera input) 1x SDI-12 (MRL-8 as master) 1x Manual observer input (has no measurement input; only accepts an offset)

Device specifications	
Outputs	3x Switch output (each approx. 500 mA @ supply voltage) 1x RS-232 (1200...115200 Baud, ASCII protocol) 1x RS-485 1x USB 1x Bluetooth
Memory	8 MB internal flash memory (equivalent to approx. 1.000.000 measurement values)
Measurement interval	2 s ... 12 h
Mobile modem	2G, 3G, 4G 4 FTP/FTPS/HTTP/HTTPS servers Functions: IP call, fixed IP, time-synchronization via NTP and SMS if it is supported by the SIM card
Operating temperature	-30 ... 60 °C (-22...140 °F), 10...95 %rH
Storage temperature, humidity	-40 ... 85 °C (-40...185 °F), 10...95 %rH
Protection rating	IP 67
Housing Size L x W x H without Connectors	180 x 150 x 61 mm (7.09 x 5.91 x 2.40 inch)
Connector height above the housing	+ 27 mm (+ 1.06 inch)
Weight	1610 g (3.55 lb)



Housing height without Connectors: 61 mm

Connector height above the housing: + 27 mm

Dimensions MRL-8