The COMBILOG 1022 is a data logger with compact design, combined with integrated LC-display and memory slot suitable for SD cards. This data logger was developed for meteorological, hydrological and environmental measuring systems, but it is equally suitable for countless further applications in industrial production. The COMBILOG 1022 features high performance, compact design (SMD components) and low power consumption.

DESCRIPTION

The data logger is equipped with 8 analogue and 6 digital measuring channels; further channels for numeric calculation may be configured. Four serial interfaces USB, Ethernet, RS232 and RS485 are built-in, featuring communication via ASCII, PROFIBUS or MODBUS. Supply voltage ranges 10…28 V DC. Data storage is achieved by internal Flash (7 MB) or SD memory card (up to 2 GB), optionally.

"SELECT" switch and 4-line LCD on the front panel allow to enter or modify a number of different modes and functions, such as scan rate and averaging time, as well as offset or gain for mathematical adaption of certain measuring parameters. Similarly, date and time, baud rate etc. are set. The data logger's operating status is indicated by the two LED's "RUN" and "ERR". The digital I/O ports are equipped with yellow LED's, indicating the individual status of each channel's signal level.

The COMBILOG 1022 can easily be mounted on a 35 mm standard rail using its "snap-in" clamp, and is therefore suitable for control cabinet installation, or similar. All connections are featured by plug in terminal bars, each bar representing an individual functional group.

Thanks to its low power consumption, battery supplied systems for a 3 weeks continuous measuring period are possible, This period may be extended by the use of a solar panel, with charge regulator.

For applications like outdoor use there is a version with stainless steel housing available, as well as various other accessories.

Configuring of the data logger is accomplished by means of an easy to handle WINDOWS 7/8/10 software.

COMBILOG 1022, built in
Stainless Steel Housing Type 9930.1000

Technical data are subject to change!

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COMBILOG 1022
the high Precision Data Logger
for your Application

1022.2000 BG

DATA ACQUISITION

VERSION / DATE — 01 / 05.2022

TECHNICAL DATA

Power supply:	+10...28 V DC
Operating temperature:	40...+85 °C* (* Display LCD only -20…+60 °C)
Interfaces:	1 x USB, 1 x Ethernet, 1 x RS232, 1 x RS485; each ASCII, PROFIBUS or MODBUS compatible, baud rate max. 38,400 Bit/s, data rate 400 Kbit/s
Analogue inputs:	8, isolated from processor core no isolation between channels
Data storage:	SD Memory Card; resp. 7 MB internal RAM
Display:	LCD, 4 x 16 characters, contrast adjustable
Digital inputs/outputs:	6 (direction configurable)
A/D-conversion.:	Delta-Sigma, precision app.16 Bit
Scan rate:	0.25, 1, 2, 3, 4, 5, 10, 20, 30 sec. 1, 2, 3, 4, 5, 10, 20, 30, 60 min.
Averaging interval:	1, 2, 3, 4, 5, 10, 15, 20, 30 sec. 1, 2, 3, 4, 5, 10, 15, 20, 30 min. 1, 2, 3, 4, 6, 8, 12h

AS VOLTAGE INPUT

Types of measurement:	Single-ended, differential
Ranges:	±10 V, ±5 V, ±2.5 V, ±1.25 V, ±625 mV, ±100 mV, ±25 mV, ±6.25 mV

AS CURRENT INPUT

Types of measurement:	Single-ended
Ranges:	25 mA, 12.5 mA, 6.25 mA, 3.125 mA, 1 mA, 250 µA, 62.5 µA

AS RESISTANCE INPUT

Types of measurement:	2-,3- and 4-wire
Ranges:	20 kΩ, 10 kΩ, 5 kΩ, 2.5 kΩ, 1.25 kΩ, 625 Ω, 312.5 Ω, 200 Ω

AS DIGITAL INPUT

Function:	State, frequency, counter, 8-bit Graycode receiver

AS DIGITAL OUTPUT

Function:	State, process output

HOUSING

Material:	Aluminium and ABS
Dimensions:	187 x 97 x 73 (WxHxD)
Weight:	approx. 720 g
Protection class:	IP 20

Technical data are subject to change!

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SOFTWARE

1. CONFIGURATION

The COMBILOG 1022 can completely be configured by means of the COMBILOG.EXE program. A manual data transfer can be stored in a LOG file in text format. This program is included with the delivery of the COMBILOG and is supplied on a CD Rom.

2. DATA TRANSFER AND DATA EVALUATION

COMGRAPH32 (type 1029.3002) is a software, that allows the retrieval and analysis of all measured data stored in the COMBILOG.

COMGRAPH32 runs on Windows 7/8/10 and supports data retrieval by serial interface -also virtual serial ports-, modems as well as Ethernet. In addition, importing data from ASCII files or CSV files or from SD cards is possible.

Each data logger is managed as a independent project. The data itself is stored as a SQLite3 database and optionally in a text file and can be made available to other applications via export functions, e.g. ASCII files.

An Automatic mode makes the automatic data retrieval from dataloggers at definable time periods possible.

Simple data analysis functions are possible. Data of any time period can be selected. For the selected time period a report is generated which summarizes the measured values to mean values, extreme values, sums etc. Data sets can be edited, added or deleted. Each parameter can be displayed graphically.

In addition, statistics for hourly values, monthly statistics, annual statistics and even wind statistics with an indication of wind classes can be generated and printed.

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