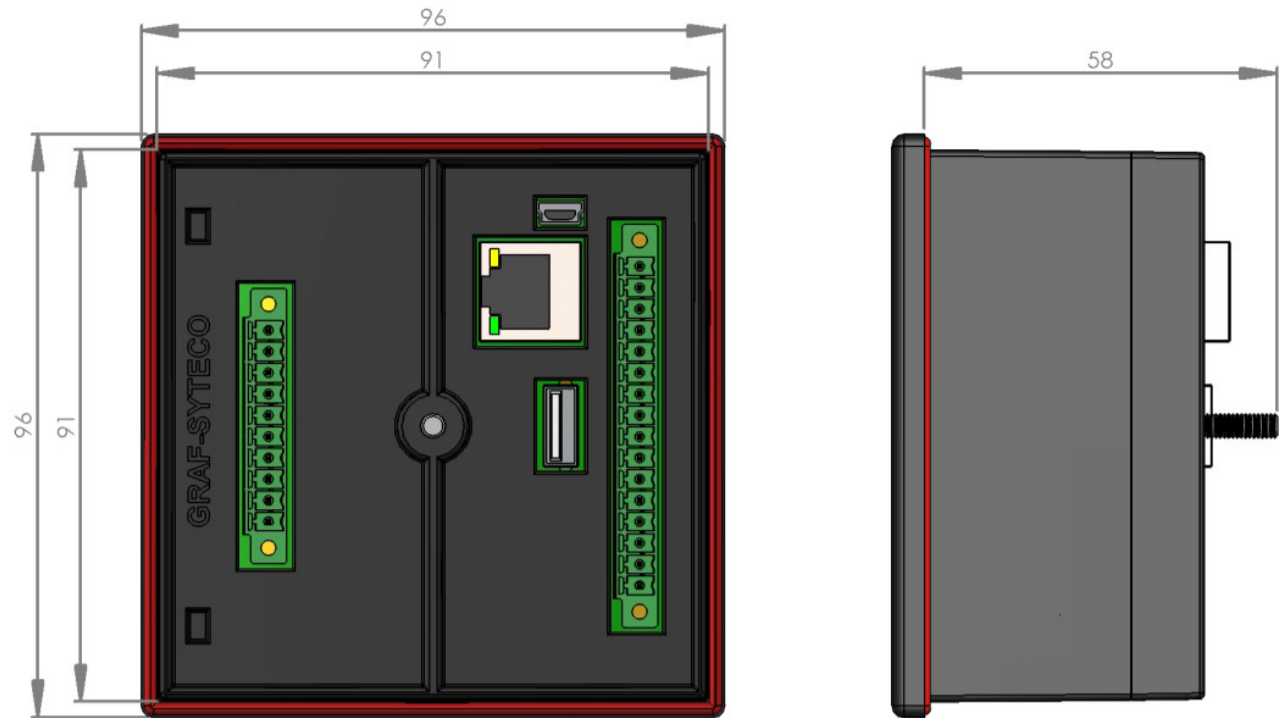



D1000_4

PERFORMANCE CHARACTERISTICS

- ⇒ 8,9 cm (3,5") QVGA-TFT
- ⇒ visible face (70 mm x 52 mm)
- ⇒ 320 x 240 pixel / 25536 colors
- ⇒ 400 MHz ARM processor
- ⇒ 64 MB RAM / 32 MB Flash / 8kB FRAM
- ⇒ 4 illuminated touch keys with status LED
- ⇒ 4 digital inputs
- ⇒ 2 digital outputs
- ⇒ 4 analog inputs
- ⇒ 2 x ISO11898 CAN interface
- ⇒ USB Host / USB Device
- ⇒ RS232 interface
- ⇒ Ethernet
- ⇒ load-dump resistant

BENEFIT

The D1000 is a flexible operating terminal with 4 illuminated touch keypads.

The active illumination of the buttons allows identification of machine conditions and availability. The operating device is programmed via the GDS software with the basic settings and the presentation of the visualization can be changed as needed.

The device is available in five different interface versions.

TECHNICAL DATA D1000_4
Display

Display type	TFT-color graphic display 320 x 240 pixel (QVGA) 8,9 cm	Backlighting	LED, white, 400 cd/m ²
Visible face	70 mm x 52 mm (3,5")	Contrast	450 : 1

Electrical Data

Supply voltage	10 - 32 VDC	Current consumption	<100 mA @ 24V (typ. 2W)
Fuse	The power supply of the digital outputs must be fused externally with a 8A fuse.	Program and data storage	<ul style="list-style-type: none"> ▪ 32 MB Flash ▪ 64 MB RAM ▪ 8 kB FRAM

Operating temperature	-25°C to +70°C	RTC	Year, Month, Week, Weekday, Day, Hour, Minute, Second
Storage temperature	-40°C to +85°C	Mass storage	up to 32 GB mass storage possible

Interface	<ul style="list-style-type: none"> ▪ 2 x CAN ISO 11898 ▪ RS232 ▪ USB Host (to connect USB mass storage) ▪ USB Device (to connect to PC) ▪ Ethernet 	IO's	<ul style="list-style-type: none"> ▪ 4 digital inputs ▪ 2 digital outputs (max. 2,5 A / diagnosable) ▪ 4 analog inputs (0-10 V / 0-20 mA)
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Programming	Logic & C programmable via comfortable GDS -Software	Parameterization	GDSDesigner
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Mechanical Data

Dimensions (W x H x D)	96 x 96 x 60 mm	Mounting hole (W x H)	91 x 91 mm
Weight	325 g	Keys	4 illuminated touch keypads with status LED and buzzer
Mounting	Frontpanel mounting via spring clip	International Protection	Frontal IP65 / backside IP54

Test Standard

CE identification	Acc. to directive 2004/108/EG	Humidity	EN 60068-2-30
EMC	EN61000	Vibration	EN 60068-2-6
Vehicle test pulse	DIN 40839 part 1 (ISO7637)	Shock	EN 60068-2-27
Temperature	EN 60068-2-2	Salt spray	EN 60068-2-11 (optional)
		e1 lable	(optional)

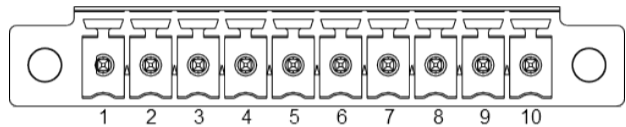
We reserve the right to make technical changes without prior notice.

PIN ASSIGNMENT

10-pin connector

mating connector: Phoenix 1,5/10-STF-3,5 oder DFMC 1,5/10-STF-3,5 (to link CAN interface)

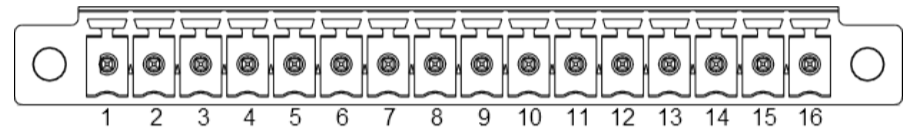
Pin	Signal	Description
1	CAN0H	CAN0 High
2	CAN0GND	CAN0 Ground
3	CAN0L	CAN0 Low
4	CAN1H	CAN1 High
5	CAN1GND	CAN1 Ground
6	CAN1L	CAN1 High
7	RS232_RX	RS232 Receive
8	RS232_TX	RS232 Transmit
9	GND	Ground
10	+24V	Supply



16-pin connector

mating connector: Phoenix MC 1,5/16-STF-3,5

Pin	Signal	Description
1	+24V	I/O supply (ext. fuse 8A)
2	GND	I/O supply GND
3	DE0	Digital input 0
4	DE1	Digital input 1
5	DE2	Digital input 2
6	DE3	Digital input 3
7	DO0	Digital output 0
8	DO1	Digital output 1
9	AE0	Analog input 0
10	A_GND	Analog GND
11	AE1	Analog input 1
12	A_GND	Analog GND
13	AE2	Analog input 2
14	A_GND	Analog GND
15	AE3	Analog input 3
16	A_GND	Analog GND



VERSIONS

	Version D1000_1	D1000_2	D1000_3	D1000_4	D1000_5
Performance					
In-/Outputs	-	-	4 digital inpts 2 digital outputs 4 analog inputs	4 digital inpts 2 digital outputs 4 analog inputs	4 digital inpts 2 digital outputs 4 analog inputs
Interfaces	2 x CAN RS 232	2 x CAN RS 485	2 x CAN RS 232	2 x CAN RS 232 Ethernet	2 x CAN RS 485
additional	-	Modbus RTU	-	up to 32 GB mass storage possible	Modbus RTU up to 32 GB mass storage possible

SUPPORT & CONTACT

RECEIVING INSPECTION

This product has been produced, tested and packaged with extensive care. Nevertheless we request a check of the device and accessories for any transportation damage or defects immediately upon receipt. Please see the delivery note for a complete list of the items supplied. A damaged device should be returned in its original packaging, if possible. The following information should accompany the device:

- a detailed description of the defect,
- your name and address.

Additional product information

- manual ‚Communication‘ (H127)
 - manual ‚GDSDesigner‘ (H301)
 - manual ‚GDSLogic‘ (H300)
- as well as on the internet:
www.graf-sytec.de



Danger!

Danger to life due to electric shock!

- ⇒ Make sure that the device is started up exclusively by trained and qualified specialists.
- ⇒ Make sure that the specialists are sufficiently skilled in the fields of:
 - control and automation technology
 - control engineering
 - automatic control engineering

Observe the applicable EN, DIN and VDE (German Electrical Engineering Association) standards when installing and connecting the device.



Danger!

Danger to life due to incorrect input or incorrect operation!

- Control sets are exclusively suitable for operating, monitoring, controlling and regulating of processes. To prevent dangerous situations with machines or systems due to incorrect input via the control set or malfunction or failure of the control set:
- ⇒ Take suitable measures when programming and designing the control set.



Caution!

Malfunction due to perturbations!

Make sure that supply and data cables are protected against EMC effects.

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