GRAF SYTECO®
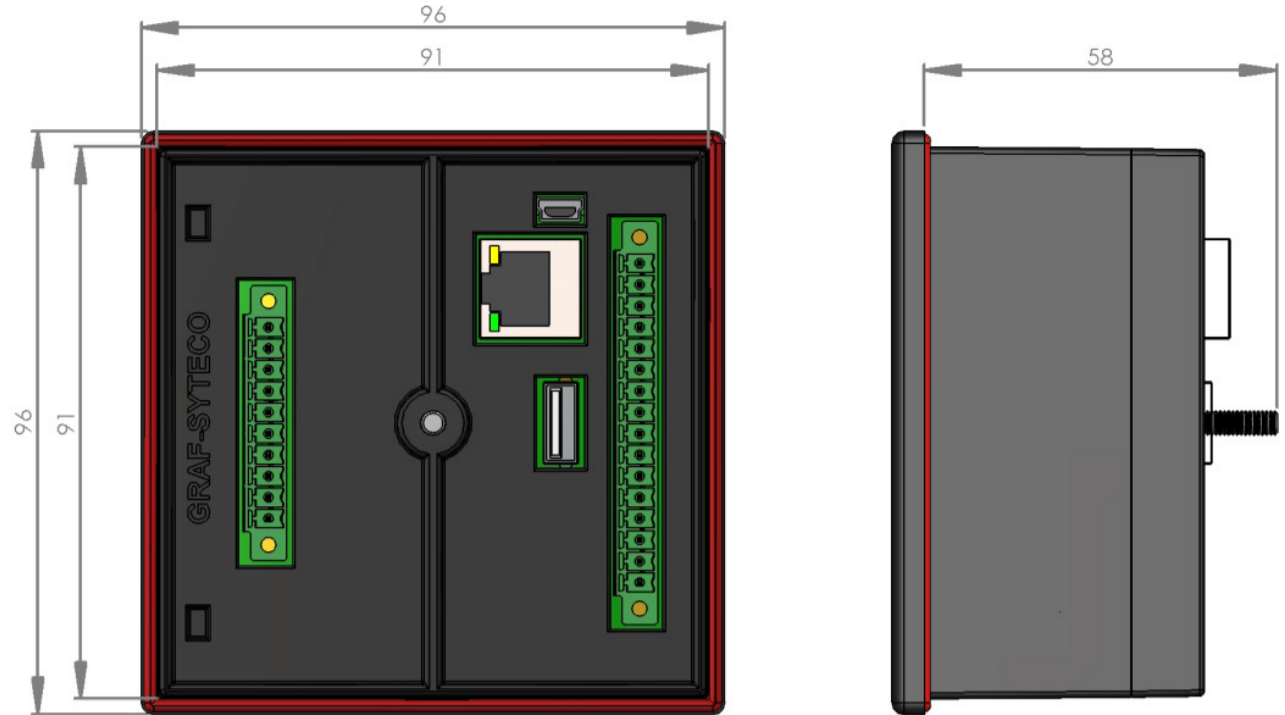
D1000_2

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
⇨ 2 x ISO11898 CAN interface
⇨ USB Host / USB Device
⇨ RS485 interface (Modbus RTU)
⇨ load-dump resistant

BENEFIT

The D1000 is a flexible operating terminal with 4 illuminated touch keyspads.
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_2

Display

Display type	TFT-color grafic display 320 x 240 pixel (QVGA) 8,9 cm	**Backlighting**	LED, white, 400 cd/m²
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**	▪ 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**	-
Interface	▪ 2 x CAN ISO 11898 ▪ RS485 (Modbus RTU) ▪ USB Host (to connect USB mass storage) ▪ USB Device (to connect to PC)	**IO's**	-
Programming	Logic & C programmable via comfortable GDS -Software	**Parameterization**	GDSDesigner

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

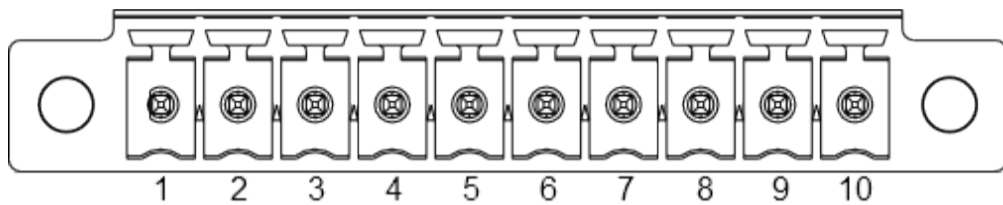|			
CE identification	Acc. to directive 2004/108/EG	**Humidity**	EN 60068-2-30
EMC	EN61000	**Vibration**	EN 60068-2-6
Vehicle test pulse	DIN 40839 part 1 (ISO7637)	**Shock**	EN 60068-2-27
Temperature	EN 60068-2-2	**Salt spray**	EN 60068-2-11 (optional)
		e1 lable	(optional)

Technical changes reserved at any time without notification

H358A1

PIN ASSIGNMENT

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

Pin	Signal	Descripion
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	RS485_A	
8	RS485_B	
9	GND	Ground
10	+24V	Supply

VERSIONS

Performance	Version	D1000_1	D1000_2	D1000_3	D1000_4	D1000_5
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-syteco.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 speciaists are sufficiently skilled in the fields of:
  • control and automation technology
  • control engineering
  • automatic control engineering

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

⚠ Danger!
Danger to life due to incorrect input or incorrect operation!

Control sets are exclusivey suitable for operating, monitoring, controlling and regulating of processes.
To prevent dangerous situations with machines od 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.

Sales manager

Uwe Schumann

Phone: +49 (0) 7464 98 66-12

Mobile: +49 (0) 151 27 15 06 62

uwe.schumann@graf-syteco.de

Technical support

Michael Bretthauer

Phone: +49 (0) 7464 98 66-255

Mobile: +49 (0) 151 27 15 06 63

support@graf-syteco.de

Order processing

Inge Frietsch

Phone: +49 (0) 7464 98 66-29

inge.frietsch@graf-syteco.de

Gabi Mauch

Phone: +49 (0) 7464 98 66-27

gabi.mauch@graf-syteco.de

GRAF-SYTECO GmbH & Co. KG   Kaiserstrasse 18   GER-78609 Tuningen
phone: +49 (0)7464 9866 0   fax: +49 (0)7464 2550
email: info@graf-syteco.de   url: www.graf-syteco.de

GRAF**S**YTECO®

H358A1