



±1888

Product Guide

DG-Series
730.U.001.02

Digital Large-Sized Displays and Meters, programmable

192x 96
240x 96
288x 96
336x 96
384x 96
336x144
432x144
528x144
624x144
720x144

- ✓ for DC Current and Voltage, Standard Signals
- ✓ for Parallel BCD-Input
- ✓ for Serial Input
RS 232 C / V.24, 20 mA / TTY, RS 422 and RS 485
- ✓ Digit Height 57 or 100 mm
- ✓ LED red or green
- ✓ 3, 4, 5 Digits
- ✓ Choice of Caption, e.g. °C, km/h
- ✓ Auxiliary Supply 100 ... 240 V AC/DC or 18 ... 35 V DC
- ✓ Wall-Mounting Case (optional)



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Digital Large-Sized Displays and Meters, programmable

Application

used to display information to be viewed a great distance off, e.g. to indicate operating conditions, malfunctions, alarm signals, nominal/actual values, order - / production line numbers, stock numbers, quantities, weights, rate, speed, power output and other units to be measured in industrial use.

Additional fields of application: automation of production, display of date, time of day, display of local weather conditions / environmental influence.

Digital large-sized indicators using LED-technology are utmost robust. They are suitable under nearly all environmental conditions. Moreover, they are a low-priced solution in the line of large-sized indicators.

Custom-made designs (size of display, digit heights, number of digits and arrangement, LED-colour, inputs, additional lettering, case configuration (e.g. wall-mounting case) are available on request.

for mounting in	switchboards, machine tools, mosaic grid panels (optional) wall-, ceiling- or outdoor mounting
for measuring	DC current or DC voltage, standard signals
display of	BCD or serial data, display of date / time of day (optional)
data format	analog inputs direct or for use on transducer, shunt, transformer digital inputs parallel or multiplex, SPS 24 V active high

Mechanical Data

case details	rectangular format
material of case	aluminium, black, anodized
front bezel	aluminium, black, anodized, mat
terminals	screw terminal barrier strip
enclosure code	IP 65 front of case IP 20 rear of case
panel fixing	screw clamps
mask lettering	caption, custom logo or extra lettering to special order
operating elements	on rear side of case
climatic suitability	
operating temperature range	0°C ... +23°C ... +50°C
storage temperature range	-20°C ... +23°C ... +70°C
relative humidity	≤75% annual average, non-condensing

dimensions (in mm)	digit height / number of digits -/D : without/with caption (e.g. °C)		
DGA/DGP/DGS	57-30	57-40 57-30/D	57-50 57-40/D 57-30/D1 57-40
DGU	front bezel	192 x 96	240 x 96
	panel cutout	186 x 90	234 x 90
	mounting depth	94	94
	bezel height	4	4
DGA/DGP/DGS	57-60 57-50/D 57-40/D1	57-60/D 57-50/D1 57-60	57-60/D1
DGU	front bezel	336 x 96	384 x 96
	panel cutout	330 x 90	378 x 90
	mounting depth	94	94
	bezel height	4	4
DGA/DGP/DGS	100-30	100-40 100-30/D	100-50 100-40/D 100-30/D1 100-40
DGU	front bezel	336 x 144	432 x 144
	panel cutout	330 x 138	426 x 138
	mounting depth	94	94
	bezel height	4	4
DGA/DGP/DGS	100-50/D 100-40/D1	100-50/D1 100-60	
DGU	front bezel	624 x 144	720 x 144
	panel cutout	618 x 138	714 x 138
	mounting depth	94	94
	bezel height	4	4

Display

display	7-segment LED	
DGA/DGP/DGS/DGU	57	100
digit height	57 mm	100 mm
viewing distance max.	approx. 20 – 25 m	approx. 40 – 45 m
display colour	red or green	

Extras

lettering	please specify
custom logo	please specify
special measuring range	on request
factory calibration	please specify
non-standard auxiliary voltage	on request
display	tendency symbols or special arrangement of digits on request
non-standard set of symbols code-table	on request
enclosure code IP 65 for overall product	housed in sheet metal case for wall-, ceiling- or outdoor mounting on request

additional options	on request
additional data	on request
prices	refer to Price Sheet No. 730.P.000.##

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mA, V

Short Form Data

Large-Sized Indicators for DC Current and DC Voltage, Standard Signals

DGA 57

192 x 96 mm
240 x 96 mm
288 x 96 mm
336 x 96 mm
384 x 96 mm

DGA 100

336 x 144 mm
432 x 144 mm
528 x 144 mm
624 x 144 mm
720 x 144 mm

Digits		Display Span
30	3 digits	-199 ... 999
40	4 digits	-1999 ... 9999
50	5 digits	-19999 ... 30000

Input	
A	DC Current 20 / 200 mA and DC Voltage 2 / 10 / 40 / 200 V

Auxiliary Voltage	
1	18 ... 35 V DC, electr. insulated
2	100 ... 240 V AC/DC, electr. insulated

Options	
0	none
x	on request

Display Colour	
R	red
G	green

Caption	
-	none
D	with 2 digit measuring unit
D1	with 4 digit measuring unit

Electrical Data

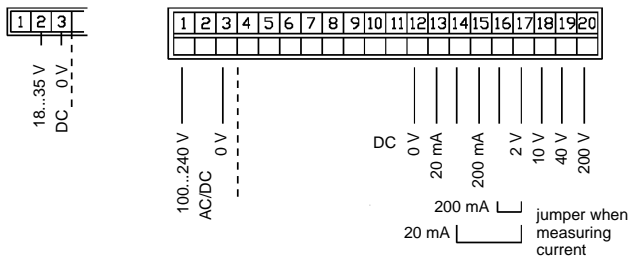
measuring ranges	input resistance
DC current	
±20 mA	100 Ω
±200 mA	10 Ω
DC voltage	
±2 V	100 kΩ
±10 V	560 kΩ
±40 V	2.2 MΩ
±200 V	12 MΩ
measuring principle	dual-slope, integrating
conversion rate	approx. 1 read per second
error, max.	±0.01% of reading, ±1 count
auxiliary voltage	DC 24 V (18 ... 35 V), electrically insulated or AC/DC 100 ... 240 V, electrically insulated
power consumption	12 VA max. (DGA 57), 18 VA max. (DGA 100)

Display

overrange indication	center segments will flash
mean value set-up	adjustable from 1 up to 99 readings
round-off last digit	adjustable: 2 nd , 5 th , 10 th steps, none
zero point and end value programmable	

Connection

plug-in terminal barrier strip



ordering example **DGA 100 - 30 A 1 0 R -**

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BCD

Short Form Data

Digital Large-Sized Displays with BCD-Input

DGP 57

192 x 96 mm
240 x 96 mm
288 x 96 mm
336 x 96 mm
384 x 96 mm

DGP 100

336 x 144 mm
432 x 144 mm
528 x 144 mm
624 x 144 mm
720 x 144 mm

Digits	
30	3 digits
40	4 digits
50	5 digits

Input	
A	BCD Input, 24 V active high

Auxiliary Voltage	
1	18 ... 35 V DC, electr. insulated
2	100 ... 240 V AC/DC, electr. insulated

Display Colour	
R	red
G	green

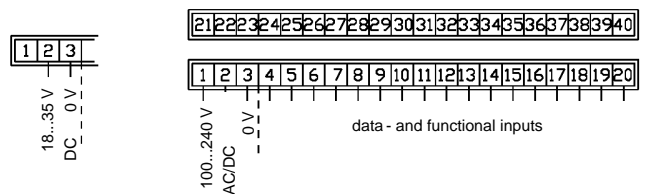
Caption	
-	none
D	with 2 digit measuring unit
D1	with 4 digit measuring unit

Electrical Data

inputs	24 V (35 V max.) active high, parallel or multiplex low: < 7 V, high: >10 V
input resistance	15 kΩ
pulse width	2 ms min.
functional inputs	ST display test DT display blanking DP decimal point LE latch enable
auxiliary voltage	DC 24 V (18 ... 35 V), electrically insulated or AC/DC 100 ... 240 V, electrically insulated
power consumption	12 VA max. (DGP 57), 18 VA max. (DGP 100)

Connection

plug-in terminal barrier strip, double-row



input assignment

BCD	Input
switches	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
01/02/03/04	U _{cc} G _{nd} ST A B C D DT LE DP DT LE DP DT LE DP DT
	BCD 10 ⁰ 10 ¹ 10 ²
11/12/13/14	U _{cc} G _{nd} A B C D DT LE DP A B C D DT LE DP
	BCD 10 ⁰ 10 ¹
	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
	LE DP DT LE DP 10 ³ 10 ⁴
	A B C D DT LE DP A B C D DT LE DP A B C D DT LE DP
	BCD 10 ² BCD 10 ³ BCD 10 ⁴

ordering example **DGP 100 - 40 A 1 G D**

Short Form Data

Digital Large-Sized Displays with Serial Input

DGS 57

192 x 96 mm
240 x 96 mm
288 x 96 mm
336 x 96 mm
384 x 96 mm
432 x 96 mm

DGS 100

336 x 144 mm
432 x 144 mm
528 x 144 mm
624 x 144 mm
720 x 144 mm

Digits

30 3 digits
40 4 digits
50 5 digits
60 6 digits (DGS 57 only)

Input

A RS 232 C / V.24 and 20 mA / TTY and RS 422 resp. RS 485

Auxiliary Voltage

1 18 ... 35 V DC, electr. insulated
2 100 ... 240 V AC/DC, electr. insulated

Display Colour

R red
G green

Caption

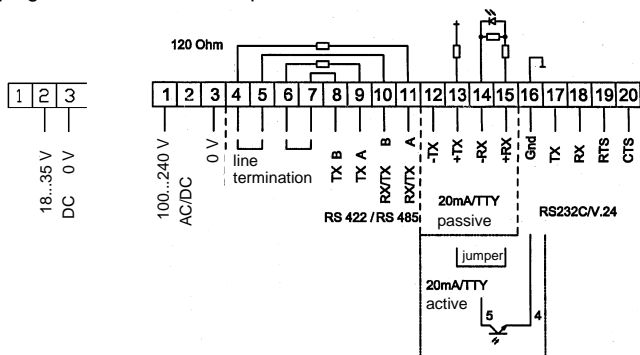
- none
D with 2 digit measuring unit
D1 with 4 digit measuring unit

Electrical Data

inputs	RS 232 C / V.24, 20 mA/TTY and RS 422 resp. RS 485
data transfer	150 / 300 / 600 / 1200 / 2400 / 4800 / 9600 / 19200 baud with/without parity bit, even / odd parity, 7 or 8 data bits with/without STX/ETX, CR, echo adjustable by DIP-switch
interval	100 ms min. between two telegrams
software functions	display test, fore-running zeros, fading-out, fading-out of up to 98 fore-running symbols, flashing sign, display annunciator direction left→right / right→left
device addresses	01 ... 99
auxiliary voltage	DC 24 V (18 ... 35 V), electrically insulated or AC/DC 100 ... 240 V, electrically insulated
power consumption	12 VA max. (DGS 57), 18 VA max. (DGS 100)
set of symbols	on request

Connection

plug-in terminal barrier strip



ordering example	DGS	57	-	60	A	2	G	-
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Short Form Data

Digital Large-Sized Indicators for Date/Time Quartz Clocks / DCF 77

DGU 57

288 x 96 mm
384 x 96 mm

DGU 100

528 x 144 mm
720 x 144 mm

Digits

40 4 digits
60 6 digits

Input

D for DCF 77 reception module

Auxiliary Voltage

1 18 ... 35 V DC, electr. insulated
2 100 ... 240 V AC/DC, electr. insulated

Options

0 none
x on request

Display Colour

R red
G green

Electrical Data

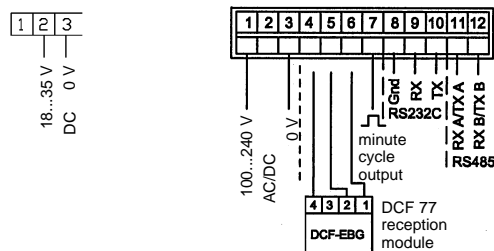
time-of-day clock	quartz clock, battery-buffered
time-base accuracy	±5 ppm max. / year
battery backup	lithium torch battery 3 V
input	for DCF 77 reception module DCF-EBG with remote supply
auxiliary voltage	DC 24 V (18 ... 35 V), electrically insulated or AC/DC 100 ... 240 V, electrically insulated
power consumption	12 VA max. (DGU 57), 18 VA max. (DGU 100)

Display

display modes	24-hour clock operation only (separated by colons) or date only (separated by decimal points) or change time of day / date each 1 ... 99 s programmable
intensity	adjustable

Connection

plug-in terminal barrier strip



ordering example	DGU	57	-	60	D	2	0	G
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DCF 77 Reception Module

reception module for DCF 77-transmitter in Braunschweig	
case	thermoplastic case for wall-mounting
dimensions (lxwxh)	120 mm x 80 mm x 60 mm
enclosure code	IP 65

ordering example	DCF	-	EBG
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- specifications subject to change without notice; date of issue 08/03 -

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