

# Charge Amplifier DACU 800

## Features

- Multi-range charge amplifier for industrial application
- 14 selectable ranges
- 13 fixed ranges 100 pC - 1'000'000 pC
- 1 variable range 100 pC - 1'000'000 pC
- Adjustable limit value with switching output
- Peak value
- RS 232 serial interface

## Electrical Data

Voltage supply	15...35 VDC
Current draw	< 70 mA
Measuring range	$\pm 100 \dots 1'000'000$ pC
Output signal	$\pm 10$ V
Characteristic curve deviation	< 1% FS
Linearity	< 0,02% FS
Output offset	< $\pm 5$ mV
Noise voltage	< 5 mVpp (0,1 Hz... 100 kHz) < 30 mVpp at 100 pC range
Output impedance	10 $\Omega$
Reset operate offset	electronically compensated
Drift	< 0,03 pC/s <sup>(2)</sup>
Frequency range (-3 dB)	0...20 kHz <sup>(1)</sup>
Control input	$\pm 5$ V... $\pm 45$ V, galv. separated
Switching output	max. 45 V, max. 100 mA galv. separated

<sup>(1)</sup> @ 100 pC...1'000'000 pC; > 2 kHz @ 1'000'000 pC

<sup>(2)</sup> DACU at least 30 min. attached to operational voltage

All specifications at ambient temperature (23°C  $\pm$ 2°C)

## Mechanical Data

Control connection	25 pin D-Sub
Sensor connection	BNC male
Enclosure material	Aluminum die cast

## Environmental Conditions

Operating temp. range	-5...+60 °C
Storage temperature	-20...+80 °C
Protection class	IP 40
EMC	EN 61000-6-2 immunity EN 61000-6-4 emission



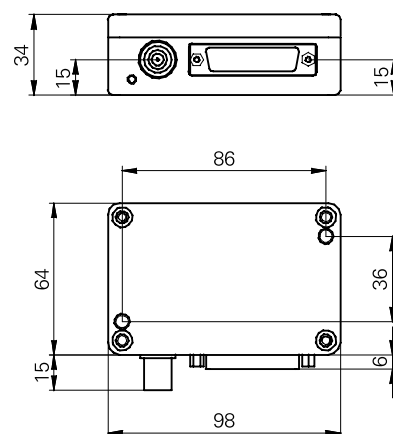
## Order Code

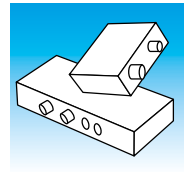
**DACU 800-0.1-1K0BS**

## Included

- Mounting screws 2 pcs. M4 x 16

## Dimensions (mm)

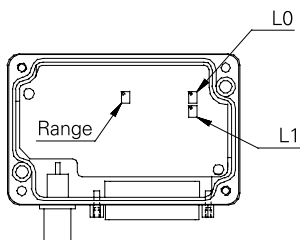




**Electrical Connections D-Sub 25**

Pin	Function
1	Signal out
2	Peak out
3	Level 1 (In or Out)
4	Level 0 (In or Out)
5	Range 3
6	Range 2
7	Range 1
8	Range 0
9	Supply GND
10	+Supply
11	Code 2
12	Code 0
13	Code Supply +
14	Signal GND
15	Alarm 1
16	Alarm 0
17	RX
18	TX
19	Com Logic Input
20	Operate
21	80% Test
22	Supply GND
23	NC
24	Code 1
25	Com Logic Output (Alarm)

**Control Elements**



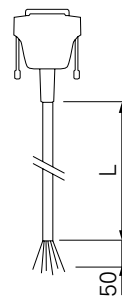
Range	Adjustment of variable range
L0	Adjustment of value 1. The limit switch voltage can be set with the potentiometer and has to be measured at pin 4. Alternatively a voltage can be supplied as well.
L1	Adjustment limit value 2. ditto, pin 3 only

**Measuring Range Selection**

Range				Measuring range
3	2	1	0	pC/10V
0	0	0	0	1'000'000
0	0	0	1	500'000
0	0	1	0	200'000
0	0	1	1	100'000
0	1	0	0	50'000
0	1	0	1	20'000
0	1	1	0	10'000
0	1	1	1	5'000
1	0	0	0	2'000
1	0	0	1	1'000
1	0	1	0	500
1	0	1	1	200
1	1	0	0	100
1	1	0	1	100'000...1'000'000
1	1	1	0	10'000...100'000
1	1	1	1	100...10'000

**Accessories**

Connecting cable with open end



Length(L)	Order code
5 m	<b>DZCS 05/DACU 8</b>