

Multi-channel, multi-functional transmitter/controller

8619

1/4" DIN Panel Mount

- Flexible analytical and flow transmitter
- Unique flexibility
- Intuitive programming
- SD card for data logging and upload/download



Bürkert's 8619 transmitter/controller is the latest addition to the process control program. The 1/4DIN panel mounted transmitter/controller incorporates a large backlit LCD display for adding up to 6 boards in a free mix for pH, conductivity incl. temperature, and output boards are connected to the digital inputs of the mainboard.

Optional software features can be simply activated when required by the application and an SD card is standard for data logging and up/down loading of parameterization files.

Special integrated dosing and control functions allow use in a large range of applications without the need of additional devices.

Technical Data

General data

Mounting panel-mounted
(stand. 1/4 DIN housing for 92 x 92 mm cutout)
wall-mounted (with mounting plate)

Materials

Seal / Screws Silicone / Stainless steel 316
Support plate for terminals Stainless steel 304
Terminal blocks PBT, contact in gold-plated copper alloy
Display / Front panel and keys PC / Silicone

Housing

Panel-mounted PPO (incl. fastening element)
Wall-mounted PA66 (incl. fastening plate, cable gland, protecting cover (display)), protecting cap (free terminal place), stiffener hinge)

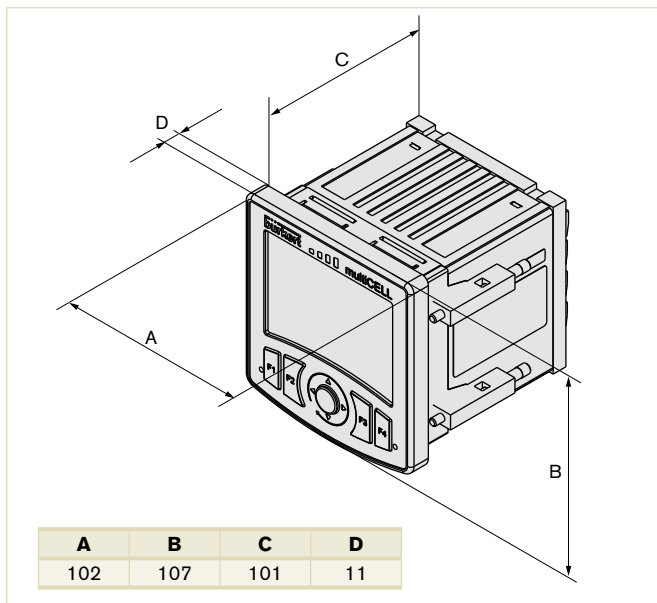
Supply 110/240 V AC

terminal protecting cover (wall-mounted version) Stainless steel 304
PVC

Cover screws (wall-mounted version)

Display LC graphic display, light blue backlitged;
128 x 168 pixels resolution; German, English,
French languages


Envelope Dimensions [mm] (see datasheet for details)



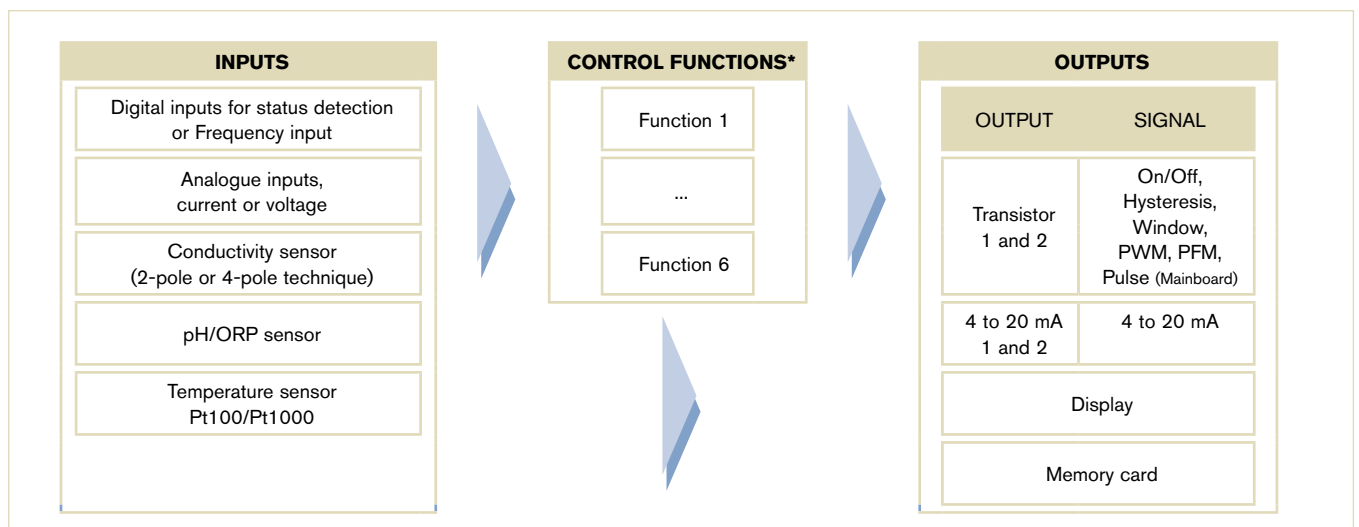
Keypad	4 soft keys [F1] [F2] [F3] [F4] for dynamic functions 1 central navigation key with \uparrow \downarrow \rightarrow \leftarrow assignments
Data logger	up to 16 values
Sensor monitor	Direct display and verification of measured sensor values
Clock	Real-time clock with date
Board slots	6
Electrical connection	Terminal blocks
Recommended cable	Shielded cable
Solid H05(07) V-U	0.2 to 1.5 mm ²
Flexible H05(07) V-K	0.2 to 1.5 mm ²
With wire end ferrule	0.2 to 1.5 mm ²
With plastic collar ferrule	0.2 to 1.5 mm ²

Technische Daten (Fort.)

Electrical data		
Device version	Panel-mounted - Mainboard	Wall-mounted - Power supply board
Operating voltage ("SUPPLY")	12 - 36 V DC, $\pm 10\%$, filtered and regulated, SELV (safety extra low voltage) circuit with a non dangerous energy level	<ul style="list-style-type: none"> 12 - 36 V DC $\pm 10\%$, filtered and regulated, SELV (safety extra low voltage) circuit with a non dangerous energy level 110/240 V AC, 50/60 Hz, max. 500 mA, integrated protection: 3.15 A time delay fuse
Power consumption (of multiCELL device - without additional boards and outputs not connected)	Max. 1.5 VA	Max. 2 VA
Power charges ("PWR OUT" or "POWER OUT" acc. to version)	12 - 36 V DC, max 1.8 A protected against polarity reversals	<ul style="list-style-type: none"> 12 - 36 V DC version: 12 - 36 V DC, max 1.8 A protected against polarity reversals 110 - 240 V AC version: 24 V DC $\pm 2\%$, filtered and regulated, SELV (safety extra low voltage) circuit with a non dangerous energy level, max 1.2 A, protected against polarity reversals The allowed max. current depends on the ambient temperature: see diagram below
Device version	Panel-mounted - Mainboard	Wall-mounted - Mainboard
Digital inputs DI1, DI2	Voltage: 0 - 36 V DC, input impedance 3 k Ω Switching threshold : Von = 5 - 36 V DC, Voff < 2 V DC; Frequency: 0.5 to 2500 Hz Galvanic insulation, protected against reversed polarity of DC and voltage spikes	Voltage: 0 - 36 V DC, input impedance 3 k Ω Switching threshold : Von = 5 - 36 V DC, Voff < 2 V DC; Frequency: 0.5 to 2500 Hz Galvanic insulation, protected against reversed polarity of DC and voltage spikes
Digital outputs DO1, DO2	Transistor: can be wired as PNP or NPN, galvanic insulation, protected against short circuit, max. 36 V DC, max. 700 mA per transistor output, 1 A max. in total if both transistor outputs are used; Operating modes: On/Off, Hysteresis, Window, PWM, PFM, Pulse Frequency: max. 2000 Hz	Transistor: can be wired as PNP or NPN, galvanic insulation, protected against short circuit, max. 36 V DC, max. 700 mA per transistor output, 1 A max. in total if both transistor outputs are used Operating modes: On/Off, Hysteresis, Window, PWM, PFM, Pulse Frequency: max. 2000 Hz
Analogue output AO1, AO2	4 to 20 mA, can be wired as sourcing or sinking, galvanic insulation, protected against reversed polarity of DC, max. loop impedance: 1100 Ω at 36 V DC, 610 Ω at 24 V DC, 100 Ω at 12 V DC Resolution: 6 μ A	4 to 20 mA, can be wired as sourcing or sinking, galvanic insulation, protected against reversed polarity of DC, max. loop impedance: 1100 Ω at 36 V DC, 610 Ω at 24 V DC, 100 Ω at 12 V DC Resolution: 6 μ A
Memory card Type Capacity	SD (Secure Digital) or SDHC (Secure Digital High Capacity) max. 8 GB	
Additional boards - output board		
Power consumption	Max. 0.1 VA	
Digital outputs DO1, DO2	Transistor: can be wired as PNP or NPN, galvanic insulation, protected against short circuit, max. 36 V DC, max. 700 mA per transistor output, 1 A max. in total if both transistor outputs are used; Operating modes: On/Off, Hysteresis, Window, PWM, PFM; Frequency: max. 2000 Hz	
Analogue output AO1, AO2	4 to 20 mA, can be wired as sourcing or sinking, galvanic insulation, protected against reversed polarity of DC, max. loop impedance: 1100 Ω at 36 V DC, 610 Ω at 24 V DC, 100 Ω at 12 V DC Resolution: 6 μ A	

 If the unit is installed in a humid environment or outdoors, the maximum allowable voltage is **35 V DC** instead of 36 V DC

Process diagram



* Can be used in parallel and independently

Ordering Chart

Description	Digital Inputs	Raw signals	RTD	Digital Outputs	Analog	Item no.
BASE unit	2	–	–	2	2	560 205
pH/ORP transmitter	2	1 (pH/ORP)	1	2	2	560 200
pH/ORP transmitter	2	2 (pH/ORP)	2	4	4	560 202
CONDUCTIVITY transmitter	2	1 (Cond.)	1	2	2	560 201
CONDUCTIVITY transmitter	2	2 (Cond.)	2	4	4	560 203
pH/ORP and CONDUCTIVITY transmitter	2	1 (pH/ORP) + 1 (Cond.)	2	4	4	560 204

Note for ordering the above multiCELL Transmitter / Controller:

In all the above variations are arithmetic, PASS, REJECT, DEVIAT, PROP, the On/Off function standard features. In the basic model, the flow measurement function is included. When a totalizer function is needed, then a flow meter via a digital input (main or input board) must be connected. Other optional features can be ordered later, see data sheet.

Hot Ideas for Water Chemistry.

The new Bürkert 8620 multi-parameter controller saves time and space by allowing PC configuration and data logging of a wide number of control variants via an SD card slot. With up to 8 control loops that can be run simultaneously and 23 inputs/outputs, the number of control variants is unprecedented. The addition of a digital serial bus, Ethernet, modem and USB connection further enhances the controllers application potential. No matter what your application is – cooling tower, boiler or membrane filtration – the mxCONTROL 8620 will meet all your needs.

