

# **Stored Program Control PDA 2<sup>+2</sup>**

**Programmable Device for Automatic  
Control of Metering Processes for  
Minimum Quantities of Liquid Media  
Having Different Flowability**

## **Technical Information**

Revision 1.1

# Stored Program Control PDA 2<sup>+2</sup>

**Control Unit for 2 Valves; Upgradable up to 4 Valves**

## 1. Function Mode

The stored program control PDA 2<sup>+2</sup> is an electronic device for clocked control of control units type CON by means of electric signals in the form of pulse-pause-lines and pulse-pause-blocks having a constant altitude as well as a variable (programmable) duration. These impulse sequences have an immediate effect on the secondary appliances. The output impulse sequences are composed by coupling pre-programmed pulse-pause-times.

The variable parameters like pulse-time, pause-time, delay time and the number of impulses are entered via an SD-Card. The SD-Card is recorded on an external PC by means of any text editor whatever (Excel, Access, et al.). It is not necessary to couple the stored program control directly with a PC.

It is possible to modify the working parameters „at site“ within the admissible limits being preset in the program of the stored program control by means of an incremental encoder and 2 keys (ENTER and ESCAPE) at the front.

The PDA 2<sup>+2</sup> has a control unit calculating how much of the existing medium is still in the can. For this every metered quantity is subtracted from the quantity originally in the can. The acquisition of the residual quantity limit that can be preset is shown in the display.

The device is designed as plug-in cassette for 19“-sub-racks. The output of pulse-pause control signals is effected via two (optional four) channels working independently from each other. The control process (beginning of control impulse output) to be started by the stored program control can be triggered for each channel e.g. by means of PLC, 10 binary individual signals or manually. By triggering an emergency stop function every current output of control signals (e.g. a metering process) will be stopped immediately.

The stored program control PDA 2<sup>+2</sup> is designed to be operated in an A.C. network with voltages of 90 to 264 V and 47 to 63 Hz.

A desktop case is available in order to use the device as desktop unit. The PDA 2<sup>+2</sup> as well as a control unit type CON is inserted into same.

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## 2. Technical Data

case	plug-in cassette for 19"; aluminium, black anodized
dimensions W x H x D	142 x 129 x 164 (3HE, 28 TE)
operating temperature	+5 to +50 °C
relative humidity factory	max. 80 %
storing temperature	-20 to +70 °C
relative humidity storage room	max. 90 %
voltage supply	90 to 264 V / 47 to 63 Hz
switching power supply	for internal supply with low voltage, double insulated
current consumption network	max. 0.3 A (max. 50ms)
electric supply	2-pole flexible lead, any polarity whatever
system of protection	IP20, with protective insulation
memory	non-volatile storage (EEPROM and Flash-Memory)
operation	operating menu in three languages (German, English, French)
pulse height	24 V DC
time ranges pulse-time (metering time) pause-time delay time	separate allocation for each line and channel 50 µs to 9999 ms each pulse (incrementation 10 µs) 120 µs to 9999 ms each pause (incrementation 10 µs) 0 to 10 s between 2 linked lines; 0,1 s ±1 ms
manual input parameter	by means of 1 incremental encoder and two operating keys
display	graphic display blue / white, 128x64 Pixel
CAN-interface	option to communicate with higher-level control unit
number of channels	2 (optional 4) output channels being independent from each other
input signals/ channel 1 analog input 10 binary input signals Stop/ Not-Aus /temperature metering medium /trouble metering process	0 ... 10 V; for variable pause-time to activate of one pulse-pause-line (resp. block) each immediate stop of a current metering process alarm upon passing over the range of control alarm in case of disturbed metering process
output signals/ channel pulse-pause-outputs readiness for service end of pulse sequence /temperature metering medium /trouble metering process analog output	electric 24-V-pulses to control metering processes 0 V = not ready for work, 24 V ±20 % = ready for work 24 V-pulse having a duration of 100 ms 24 V = normal; 0 V = leave range of control 24 V = normal; 0 V = metering process disturbed Tsoll (0 to 5 V) set value for the media temperature
electric supplies CAN-interface in-/ outputs for each channel	9-pole sub-d-socket 25-pole sub-d-socket
load outputs	pulse output approx. 2 W (80mA)
status display channel	per channel 1 green LED for status display
weight	approx.. 1.5 kg

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In- and output signals / channel marked with „/“ are not available for each control unit type CON.

### **3. Safety Instructions**

The described devices and machines are equipment to be used in industrial installations.

Therefore the persons in charge for the safety of the installation have to guarantee that

- it is forbidden for unqualified personnel to effect working at the devices or machine or near same
- only qualified personnel will be instructed to work at the devices or machines
- among other things the operating manual and the other documents of the product documentation will always be at the disposal of these persons while effecting the corresponding work and that they will be obliged to observe these documents resolutely.

Qualified personnel are persons, who due to their training, experience and instruction as well as to their knowledge of relevant standards, regulations and rules for prevention of accidents and operating conditions have been entitled by the person in charge for the safety of the installation to effect the required work and who are able to recognize and avoid possible dangers on this occasion. (definitions for specialists according to 105 or ICE 364)

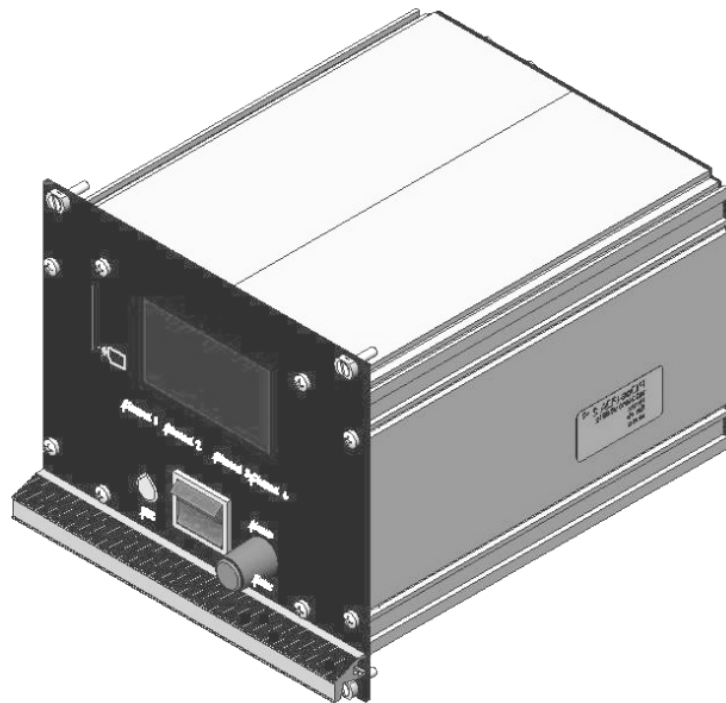
The warranty for the products of PICODOSTEC GmbH is explicitly subject to the current version of our general terms and conditions.

These safety instructions do not lay claim to completeness.

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## 4. Layout



We took a lot of care over the verification of this product documentation. It is, however, not possible to guarantee that the documentation is faultless. If you have any further questions, please get in contact with:

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