

UNIVERSAL DISPLAYS UD-720

DESCRIPTION

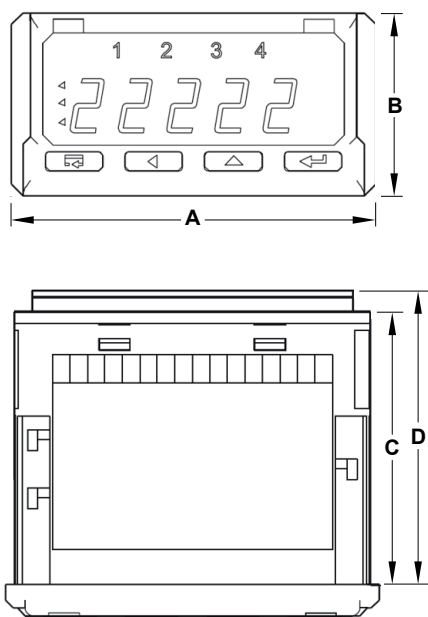
The ADCATrol UD-720 is a programmable digital panel display used for the measurement of standard sensor and analog signals applied in automation. It is ideally suited for use with our ADCATrol range of instrumentation such as pressure transmitters, temperature probes and others. The unit features a 24 V DC supply output for transmitters.

MAIN FEATURES

Easy to commission with user-friendly interface.
Measuring inputs for resistance thermometer (RTD), thermocouples (TC), 0/4 to 20 mA, 0 to 10 V, 0 to 60 mV and resistance (Ω).
2 NO relay alarm outputs.
6 types of alarm functions.
24 V DC supply output to power transmitters and others.
Three color display (14 mm high) with programmable color settings based on the measured value.
21-point individual characteristic function for input rescaling and conversion.
Galvanically isolated inputs and outputs.
Fully programmable from the front panel.
Password protection.
IP rating IP 65.

OPTIONS: Change-over relay alarm outputs.
0/4 to 20 mA and 0 to 10 V outputs for retransmission of any of the measured inputs.
RS-485 Modbus RTU communication.

AVAILABLE MODELS: UD-720.



DIMENSIONS (mm)					
MODEL	A	B	C	D	WGT. (kg)
UD-720	96	48	67	93	0,2

TECHNICAL DATA

DIGITAL INTERFACE	
Interface type	RS-485
Protocol	Modbus RTU 8N2, 8E1, 8O1, 8N1
Baud rate	4,8, 9,6, 19,2, 38,4, 57,6, 115,2 kbit/s

SAFETY AND COMPATIBILITY REQUIREMENTS	
Electromagnetic compatibility	Noise immunity according to EN 61000-6-2
	Noise emissions according to EN 61000-6-4
Pollution level	Level 2 acc. to EN 61010-1
Installation category	Category III acc. to EN 61010-1
Maximal phase-to-earth operating voltage	Supply circuit: 300 V; Remaining circuits: 50 V acc. to EN 61010-1

GENERAL

Supply voltage	85 to 253 V AC/DC or 20 to 40 V AC/DC
Ambient temperature	-25 to +55 °C
Storage temperature	-30 to +70 °C
IP rating	IP 65 (front); IP 10 (rear)
Material	Housing in PC/ABS
Humidity	< 85% without condensation
Front panel	96 x 48 mm (cutout: 92 x 45 mm)
Operating position	Any
External magnetic field	0 to 400 A/m

OUTPUTS

Relay	2 NO volt free contacts, 0,5 A @ 250 V AC
	2 change-over volt free contacts 0,5 A @ 230 V AC
OC open-collector	Passive NPN, 30 mA @ 30 V DC
Continuous voltage	0 to 10 V, 500 Ω min.
Continuous current	0/4 to 20 mA, 500 Ω max.
Transducer supply	24 V DC, 30 mA max.

INPUTS *

PT100	-200 to 850 °C
PT500	-200 to 850 °C
PT1000	-200 to 850 °C
Fe-CuNi (J)	-100 to 1200 °C
NiCr-NiAl (K)	-100 to 1372 °C
PtRh10-Pt (S)	0 to 1767 °C
PtRh13-Pt (R)	0 to 1767 °C
NiCr-CuNi (E)	-100 to 1000 °C
NiCrSi-NiSi (N)	-100 to 1300 °C
Current input (I)	-20 to 20 mA
Voltage input (U)	-10 to 10 V
mV input (mV)	0 to 60 mV

* Class 0,1. Additional errors:

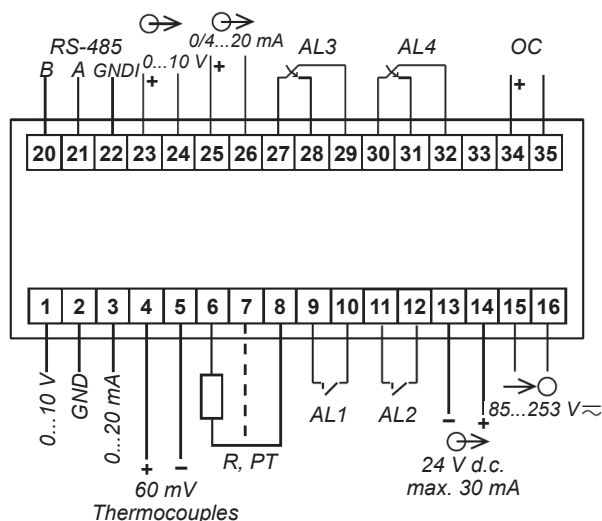
Due to automatic compensation of the reference junction temp.: ≤ 1 °C.

Due to automatic compensation of the cable resistance for RTDs: ≤ 0,5 °C.

Due to automatic compensation of the cables for resistance measurement: ≤ 0,2 Ω.

From temperature changes: 100% of the class / 10 K.

ELECTRICAL CONNECTIONS



ORDERING CODES UD-720

GROUP DESIGNATION	UD720	.1	.0
UD-720 – Universal display	UD720		
POWER SUPPLY			
85 to 253 V AC/DC		.1	
20 to 40 V AC/DC		.2	
ADDITIONAL OUTPUTS			
No additional outputs			.0
OC open-collector output, RS-485 and analog outputs			.1
OC open-collector output, RS-485, analog outputs and 2 change-over relay outputs			.2