



DPT02

# Digital Universal Input Signal Converter(Signal Converter)

Singal / Meter

[www.eyc-tech.com](http://www.eyc-tech.com)



## Features

- Local display, easy keypad programming the signal output and scale,LED for working status
- Measuring input type:DC current / DC voltage
- More output type:Analog output / RS-485 / Relay / 2 Channel output
- 20-Point linear calibration
- Signal isolation :Power supply / Analog input / Analog output / RS-485
- Power supply:AC 85 ... 253 V;Auxiliary supply output(DC 16 ... 25 V / 23 mA), use for 2-wire & 3-wire transmitter
- User-friendly. high light red LED display panel, 7.6 mm(Height of character), 3 digits, -199 ... 999, 7-segment display
- DIN rail installation, high safety & stability, fire-proof case, moisture-proof cover

## Application

- Chemical industry / Energy / Oil & gas / Marine / Water circulation system / Factory automation
- Metal & steel / Cement / Pulp & paper / Pharmaceuticals / Food & beverage

## Specification

## Display

Display readout	3 Digits(-199 ... +999)
Decimal point	0 ... 2 Place, button
Screen	Highlight red LED(7-Segment)
Digit height	7.6 mm
Accuracy	0.2%F.S.±1 digital
Sampling time	4 cycle / sec
Response time adjustment range	0.5 ... 60 sec
Parameter setting mode	Button

## Input

Voltage	0 ... 10V / 2 ... 10V / 0 ... 1V / 0 ... 5V / 0.2 ... 1V / 1 ... 5V
Current	0 ... 20 mA / 4 ... 20 mA

## Output

Voltage	0 ... 1V / 0.2 ... 1V / 0 ... 5V / 1 ... 5V / 0 ... 10V / 2 ... 10V / 1 ... 0V / 1 ... 0.2V / 5 ... 0V / 5 ... 1V / 10 ... 0V / 10 ... 2V
Current	0 ... 20 mA / 4 ... 20 mA / 20 ... 0 mA / 20 ... 4 mA
Output signal	Analog output, Relasy, RS-485
Load resistance	Current: RL < 500 Ω Voltage: ≥ 10 KΩ
Analog output resolution	16 bit
Signal error detection	Yes

## Relays

Alarm hysteresis	Display value or 0 ... 100%
ON and OFF delay	0 ... 3600 sec
Output signal error detection	Yes
Relay actuation direction	Upper limit: HI, AL; Lower limit: LO, AL
Relay capacity	Max current: 6 A Max voltage: AC 277 C / DC 30 V Max power: 1500 VA / 180 W

## Communication

Protocol	RS-485 Modbus RTU, master or slave
RS-485 baud rate	9600, 19200, 38400, 57600, 115200 bps

## Environment

Operating environment	-10 ... +60°C; 0 ... 95%(Non-condensing)
Storage environment	-25 ... +70°C

## Electrical

Power supply / Voltage	AC 85 ... 253 V
Auxiliary power	DC 16 ... 25 V / 23 mA
Insulation voltage endurance	2 KVac / 1 min
Parameter memory type	Flash
Dissipated power	5 W

## Isolation

Power supply / Analog input / Analog output / RS-485	
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## Protect

IP rating	IP20
Electrical protection	■ Polarity protection ■ Over-voltage

## CE Certification

Emission	EN 61326-1:2013 CISPR11:2009+A1:2010 Group 1 Class B EN 61000-3-2:2014 EN 61000-3-3:2013
Immunity	EN 61326-1:2013 IEC 61000-4-2:2008 IEC 61000-4-3:2006+A1:2007+A2:2010 IEC 61000-4-4:2012 IEC 61000-4-5:2014 IEC 61000-4-6:2013 IEC 61000-4-8:2009 IEC 61000-4-11:2004

## Material

Housing	ABS fire-proof class(UL94V-0)
Dimensions(HxWxD)	99.5x25.5x104.2 mm
Weight	About 158 g

## Ordering Guide

Type	DPT02	—	A
Output	1 Analog output	—	A
	2 Analog output	—	B
	1 Analog output+RS-485	—	C
	1 Analog output+RS-485+Relay	—	D

## Connection Diagram

31	34	DPT02-A(1 Analog output)	DPT02-B(2 Analog output)
21 22 23 24		31:AC 85 ... 253 V 34:AC 85 ... 253 V	31:AC 85 ... 253 V 34:AC 85 ... 253 V 21:-A. OUT2 22:+A. OUT2
	eyc	1: 2:-mA -V 3:+mA 4:+exc. +V	
1 2 3 4		11:-A. OUT1 12:+A. OUT1 13: 14:	
11 12 13 14			

31	34	DPT02-C(1 Analog output+RS-485)	DPT02-D(1 Analog output+RS-485+Relay)
21 22 23 24		31:AC 85 ... 253 V 34:AC 85 ... 253 V 21:GND(-) 24:VCC(+)	31:AC 85 ... 253 V 34:AC 85 ... 253 V 21:relay. COM 22:relay. NO 23:relay. NC
	eyc	1: 2:-mA -V 3:+mA 4:+exc. +V	
1 2 3 4		11:-A. OUT1 12:+A. OUT1 13:RS-485 D- 14:RS-485 D+	
11 12 13 14			

## Diagram

Unit : mm

