

# Signal Converters/Isolators

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Displays

Large Displays

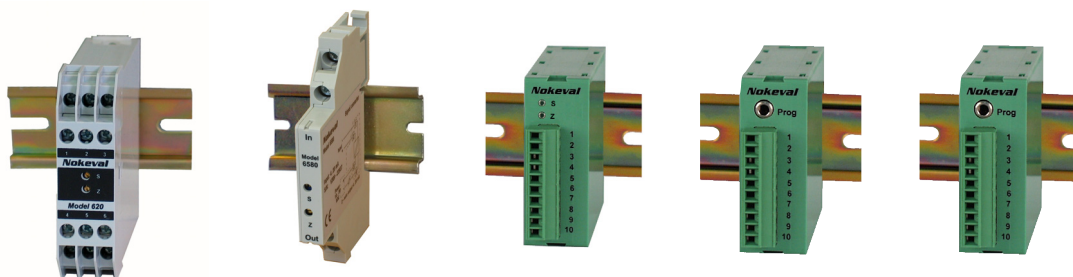
Transmitters

**Converters**

Wireless Transmitters

Software

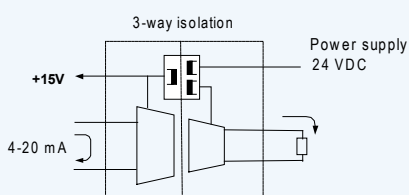
Sensors



4

	Isolator and signal converter	2 wire isolator	Loop powered isolator	Universal isolator and converter	4 channel I/O-unit
Model	641	6580	6570	6740	7181
Manufacturer	Nokeval	Nokeval	Nokeval	Nokeval	Nokeval
Inputs	0/4..20 mA, 20..4 mA 0..5/10 V, 10..0 V ±10 V 2 wire 4..20 mA Potentiometer 100Ω..1MΩ	0..20 mA 4..20 mA 0..10 V	4..20 mA  Operating energy is taken from input current loop	0..20 mA, -20..+20 mA 4..20 mA 0..5 V 0..10 V, -10 V..+10 V 0..100 mV, -100..+100 mV Pot. 0..1 kΩ	4 digital inputs or outputs
Outputs	0..20 mA, 4..20 mA 20..4 mA (reverse) 0.5 V, 0..10 V 10/5..0 V (reverse) ±10 V 2 wire 4..20 mA	2 wire 4-20 mA  Operating energy is taken from output current loop	0..20 mA 4..20 mA 0..10 V	0..20 mA 4..20 mA 0.5 V 0..10 V	Serial output RS485 /RS232
Programming	DIP switches or factory settings	Factory settings	Factory settings	MekuWin (PC) or 6790 programmer	MekuWin (PC) or 6790 programmer
Galvanic isolation	>1 kV, three way isolation	>1 kV	>2 kV	>2 kV, three way isolation	>2 kV
Power supply	22..30 VDC	2 wire (10-32 VDC)	From input loop	22..30 VDC	24 VDC
Current consumption	40 mA for V output 60 mA for mA output 80 mA with sensor supply		Voltage drop 7 V + output current voltage drop *	40 mA V output 60 mA mA output	80 mA
Accuracy	<0.05% of span	<0.05% of span	<0.05% of span	<0.05% of span	
Linearity	<0.05% of span	<0.05% of span	<0.03% of span	<0.05% of span	
Input resistance	50 Ω for mA input 1 MΩ for V input	50 Ω for mA input 1 MΩ for V input	350 Ω	5 Ω for mA input 1 MΩ for V input	
Output load	600 Ω, mA output	2 wire output*	max 300 Ω *	600 Ω mA output	
Damping	1, 250 500, 700 ms	100 ms	100 ms	200 ms	
Operating temperature	0..60°C	0..60°C	0..60°C	-10..60°C	-10..60°C
Installation	DIN rail, 35 mm	DIN rail, 35 mm	DIN rail, 35 mm	DIN rail, 35 mm	DIN rail, 35 mm
Terminals	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>
Dimensions	22.5 x 82 x 99 mm WHD	9.5 x 81 x 58 mm WHD	22,5 x 60 x 75 mm WHD	22,5 x 60 x 75 mm WHD	22,5 x 60 x 75 mm WHD
Note	All ranges can be selected by DIP switches, but calibration is needed after selection.	*Loading depends on power supply voltage, e.g. (24V-10V)/20mA=700 Ω		Supports also temperature sensors. All ranges are calibrated after selection.	Suitable for software that needs digital inputs and outputs.
Model	641	6580	6570	6740	7181
Price	140 €	95 €	95 €	160 €	130 €

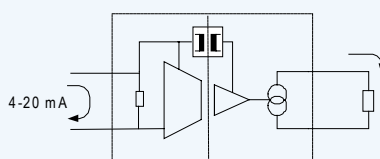
Signal converter 641



**Inputs**  
0/4..20 mA, 0..5/10 V, ±10V  
2-wire 4-20 mA  
Potentiometer

**Outputs**  
0/4..20 mA, 0..5/10V, ±10V  
2-wire 4..20 mA

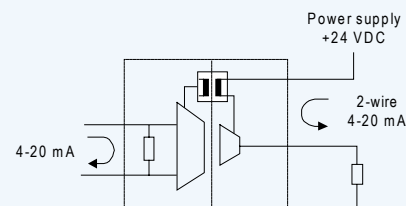
Loop powered converter 6570



**Output:**  
4-20 mA  
0-10 V

**Input:**  
4-20 mA  
0-10 V

2 wire converter 6580



**Output**  
4-20 mA

# Serial Data Converters

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**Converters**

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Software

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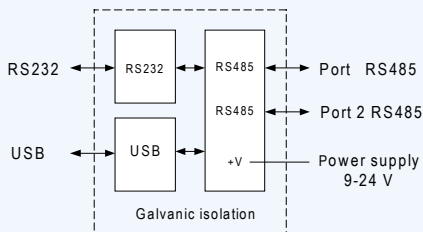
4

	Serial to Ethernet converter	4 channel RS232/485 - mA/V	USB-RS485 Serial Converter	USB-RS485 Serial Converter	USB-RS485-RS232 Serial Converter
Model	PC-E	7470	DCS770	DCS771	RCS770
Manufacturer		Nokeval	Nokeval	Nokeval	Nokeval
Input	RS485 Modbus RTU	RS485/232	USB	USB	USB / RS232 / RS-485*
Output	Modbus TC/IP	4 x 0/4-20 mA, 0-10V	RS485	RS485 + power supply*	RS485/422 / RS232*
Baud rate	300..115200ud	300..19200 baud	300..115200 baud	300..115200 baud	1200..115200 baud
Settings	PC software	MekuWin (PC) or 6790	-	-	By jumpers
Power supply	24 VDC ±15%	24 VDC ±15 %	From USB	From USB	9..24 VDC or from USB
Galvanic isolation	-	>1 kV (RS485)	-	-	>1 kV
Terminals	RS-485	Terminals 1.5 mm <sup>2</sup>	Terminals 1.5 mm <sup>2</sup>	Terminals 1.5 mm <sup>2</sup>	Terminals 1.5 mm <sup>2</sup>
	RS232	-	-	-	9 pin. D conn. (female)
	USB	-	USB/ B (female)	USB/ B (female)	USB/ B (female)
Indicators	-	-	3 LED lamps	3 LED lamps	3 LED lamps
Installations	35 mm DIN rail	35 mm DIN rail / desktop	Desktop	Desktop	35 mm DIN rail / desktop
Dimensions	22,5 x 60 x 75 mm WHD	70 x 85 x 60 mm WHD	31 x 24 x 56 mm WHD	66 x 28 x 66 mm WHD	70 x 85 x 60 mm WHD
Note	Supports PromoLog software and transmitters with serial output RS485  Typical application is remote temperature measurement over Internet.	4 analog outputs for serial input RS232/485  Modbus RTU, Nokeval SCL protocol or ASCII  Output accuracy 0.1% of span	DCS770 has removable terminals for RS485.	*Converter can power transmitters: 10 V, max.120 mA or 24 V, max. 50 mA.  Option: External power supply (91705) 230 VAC/9 VDC <b>Price 25 €.</b>	* Conversions: USB-485, USB-422, USB-232, 485-232, 422-232, 485-485 (repeater).  USB, 232 and 485/422 are galvanically isolated
Model	PC-E	7470	DCS770	DCS771	RCS770
Price	285 €	290 €	73 €	98 €	165 €

## 6 serial conversions by signal converter RCS770



RS485 is isolated from USB and RS232 port



Signal conversions

- USB ↔ RS232
- USB ↔ RS485
- USB ↔ RS422
- RS485 ↔ RS232
- RS422 ↔ RS232
- RS485 ↔ RS485

Conversions are selected by jumpers

## DCS772 converter for configurations



DCS772 converter for USB port can be used for configuration of devices that have a socket in the front panel. POL-cable and MekuWin software are included.

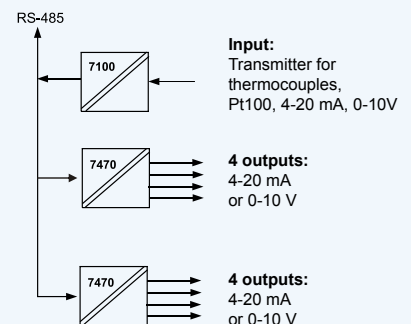
**Price 40 €**

POL-3PIN adapter cable can be used for all devices that have 3 pin connector for configuration as wireless transmitters together with POL-232 cable or DCS772.

**Price 10 €**

## Analog outputs for serial bus using 4 channel serial converter 7470

Analog outputs from software



**Input:**  
Transmitter for thermocouples, Pt100, 4-20 mA, 0-10V

**4 outputs:**  
4-20 mA or 0-10 V

**4 outputs:**  
4-20 mA or 0-10 V