



## touchMATRIX<sup>®</sup> Indicator 6888.5150 / 6888.5155

Pulse counter, tachometer and speed indicator with touchscreen and graphic display

### Product Features:

- Multifunctional unit with several operating modes, e. g. speed or position indicator, counter, flow time indicator, timer, stopwatch or process indicator
- Universal inputs (HTL/RS422) for encoders / sensors with NPN / PNP / NAMUR characteristic
- Bright and high-contrast display with event-dependent color variations
- Emulation of a 7-segment display inclusively icons and units
- Intuitive and easy parameterization by plain text and touchscreen
- 5 /24 V auxiliary output for encoder supply
- Input frequencies up to 1 MHz
- Linearization with 24 control points
- Numerous features, e. g. scaling, filtering, start-up suppression
- 3.78 x 1.89 inch (96 x 48 mm) norm panel housing and IP65 protection

### Available Options:

**6888.5150:** Basic unit with HTL inputs (A, B), 3 control inputs  
**6888.5155:** Basic unit with HTL / RS422 inputs (A, /A, B, /B), 3 control inputs

- Option **AC:** Power supply 115 ... 230 VAC
- Option **AO:** 16 bit analog output, 4 control outputs, serial RS232 interface
- Option **AR:** 16 bit analog output, 4 control outputs, serial RS485 interface
- Option **CO:** 4 control outputs, serial RS232 interface
- Option **CR:** 4 control outputs, serial RS485 interface
- Option **RL:** 2 relay outputs

### Options can be combined

Technical Specifications:		
<b>Connections:</b>	Connector type:	screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Power supply DC:</b>	Input voltage:	18 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Consumption:	approx. 100 mA (unloaded)
	Fuse protection:	extern: T 0.5 A
<b>Power supply AC:</b> (Option AC)	Input voltage:	115 ... 230 VAC ± 10%, 50 ... 60 Hz
	Power consumption:	approx. 3 VA (unloaded)
	Fuse protection:	extern: T 1.0 A
<b>Encoder supply:</b>	DC version:	24 VDC (approx. 1 V lower than the power supply voltage), max 250 mA
	AC version:	24 VDC (± 15%) (max 150 mA until 45°C / 80 mA by more than 45°C)
<b>Encoder supply:</b> (6888.5155)	DC version:	24 VDC (approx. 1 V lower than the power supply voltage), max 250 mA or 5 VDC (± 15%), max. 250 mA
	AC version:	24 VDC (± 15%) (max 150 mA until 45°C / 80 mA by more than 45°C) or 5 VDC (± 15%), max. 250 mA)
<b>Incremental inputs:</b>	Number of inputs (channels):	2 (A, B)
	Configuration:	PNP, NPN, Namur or Tri-State
	Format:	HTL (Low 0 ... 3 V, High 9 ... 30 V)
	Frequency:	max. 250 kHz
<b>Incremental inputs:</b> (6888.5155)	Number of inputs (channels):	2 with inverted signal (A, /A, B, /B)
	Configuration:	RS422, HTL differential, HTL PNP or HTL NPN
	RS422:	max. 1 MHz (RS422 differential signal > 0,5 V)
	HTL differential:	max. 1 MHz (HTL differential signal > 2 V)
	HTL PNP / NPN:	max. 350 kHz (Low 0 ... 5 V, High 9 ... 30 V)
<b>Control inputs:</b>	Number of inputs:	3
	Format:	HTL, PNP (Low 0 ... 3 V, High 9 ... 30 V)
	Frequency:	max. 1 kHz
	Reaction time:	1 ms
	Load:	max. 2 mA at 24 VDC
<b>Accuracy:</b>	Measurement:	+/- 50 ppm, +/- 1 digit
<b>Analog output:</b> (Option AO/AR)	Configuration:	current or voltage operation
	Voltage output:	-10 ... +10 V (max. 2 mA)
	Current output:	0/4 ... 20 mA (burden: max. 270 Ohm)
	Resolution:	16 Bit
	Accuracy:	± 0,1 % 0°C ... +45°C ± 0,15 % -20°C ... 0°C und +45°C ... +60°C
	Reaction time:	< 10 ms (as of software version 6888.515006G)
<b>Control outputs:</b> (Option AO/AR/CO/CR)	Number of outputs:	4
	Format / level:	5 ... 30 V (depend on the COM+ voltage), PNP
	Output current:	max. 200 mA
	Reaction time:	< 1 ms
<b>Relay outputs:</b> (Option RL)	Number of outputs:	2
	Configuration:	potential free changeovers
	AC-Switching capacity:	max. 250 VAC / 3 A / 750 VA
	DC-Switching capacity:	max. 150 VDC / 2 A / 50 W
	Reaction time:	< 20 ms
<b>Serial interface:</b> (Option AO/AR/CO/CR)	Format (Option AO/CO):	RS232
	Format (Option AR/CR):	RS485
	Baud rate:	9600, 19200 or 38400 baud
<b>Display:</b>	Type:	Graphic LCD with backlight
	Display range:	8 digits plus sign (-99999999 ... 99999999)
	Digit height (single + dual):	13 mm (0,51 inch)
	Digit height (large display):	26mm (1,02 inch)
	Color:	red / green / yellow (selectable)
	Operation:	resistive touchscreen
<b>Housing:</b>	Material:	ABS, UL 94 V-0
	Mounting:	panel
	Dimensions (w x h x d):	96 x 48 x 116 mm / 3.78 x 1.89 x 4.56 inch
	Cut out (w x h):	91 x 43 mm / 3.58 x 1.69 inch
	Protection class:	IP65 (front), IP20 (rear)
	Weight:	approx. 200 g
<b>Ambient temperature:</b>	Operation:	-20°C ... +60°C / -4 ... 140°F non-condensing
	Storage:	-25°C ... +70°C / -13 ... 158°F
<b>Ambient conditions:</b>	Altitude:	max. 2000 m (6560 ft) above sea level
	Humidity:	max. 80% relative humidity up to 30°C
	Pollution Degree:	2
<b>Conformity and standards:</b>	EMC 2014/30/EU:	EN 61326-1: 2013 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 Class A
	LV 2014/35/EU: (Only for option AC and RL)	EN 61010-1: 2010 + A1: 2019 + AC: 2019-04 EN IEC 61010-2-201: 2018
	RoHS ( II ) 2011/65/EU	
	RoHS ( III ) 2015/863:	EN IEC 63000: 2018