

**LCD pulse counters**      **Adding or subtracting (battery)**      **Codix 130**



The Codix 130 is a simple battery powered pulse counter for fast and slow count pulses with 8-digit LCD display, optional backlighting, for NPN, PNP and high voltage applications.



Battery powered	Input type	Pulse voltage	Pulse voltage	Max. count frequency	Temperature range	High protection level	DIN front bezel	LCD display	Lockable reset

### Powerful

- High quality LCD display with 8 mm high figures.
- Count direction adding and subtracting via control input.
- Battery life approx. 8 years.
- Optional display backlighting.
- Filter function for bounce-free counting with mechanical contacts.
- Count frequency max. 12 kHz.
- High protection level IP65.

### Simple

- Screw terminals, RM 5 mm.
- Reset key can be enabled via "Reset Enable" input.
- For positive and negative counting edges, depending on version.
- High voltage version for 10 ... 260 V AC/DC voltage pulses.
- Large 8-digit LCD display with 8 mm high figures.

**Order code**      **6.130 . 012 . 8XX**

**a** Backlighting  
5 = without  
6 = with

**b** Input type: add/sub<sup>1)</sup> – single-channel, adding or subtracting counting

Input type	INP A				INP B			
0 = add/sub <sup>1)</sup>	0 ... 0.7 V DC	count	NPN	7 kHz	0 ... 0.7 V DC	count	NPN	30 Hz
2 = add/sub <sup>1)</sup>	4 ... 30 V DC	count	PNP	12 kHz	0 ... 0.7 V DC	count	NPN	30 Hz
3 = add/sub <sup>1)</sup>	10 ... 260 V AC/DC	count	AC/DC	30 Hz	10 ... 260 V AC/DC	reset	AC/DC	–

**Delivery specification**

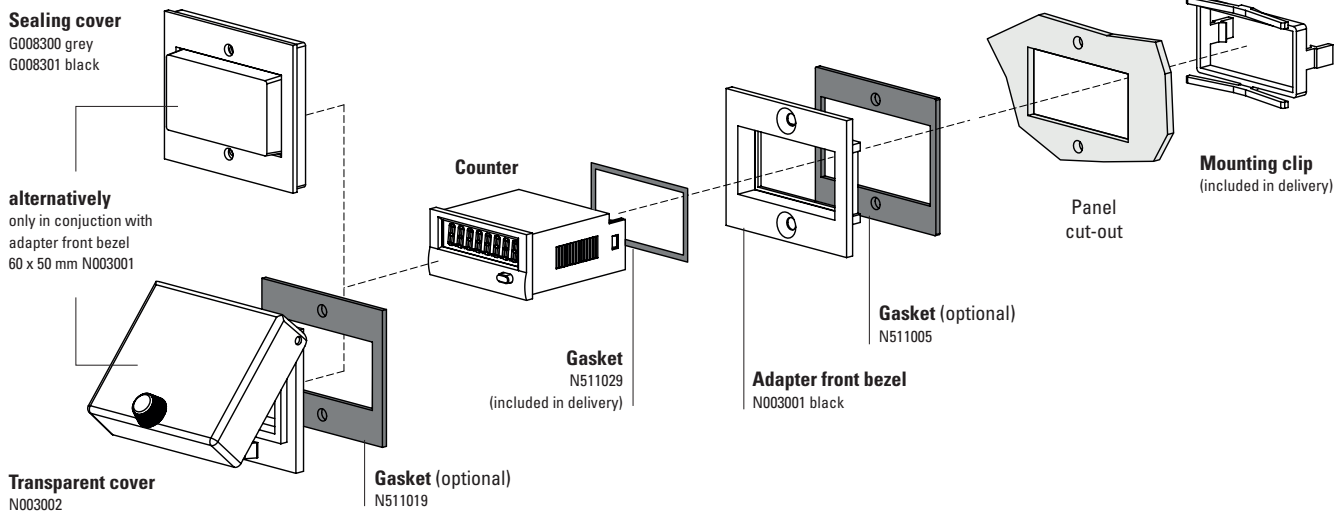
- Pulse counter
- Mounting clip
- Front bezel for screw mounting (T008181) 56 x 40 mm [2.20 x 1.57"], panel cut-out 50 x 25 mm [1.97 x 0.98"]
- Front bezel for clip mounting (T008180) 53 x 28 mm [2.09 x 1.10"], panel cut-out 50 x 25 mm [1.97 x 0.98"]
- Gasket
- Instruction manual, multilingual

1) Single-channel, adding or subtracting counting.

# Pulse counters, electronic

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### Accessories / Mounting examples



		Type / size	Description		Order no.	suitable gasket
<b>Adapter front bezel</b>		<b>53 x 28 mm</b> [2.09 x 1.10"]	for cut-out 50 x 25 mm [1.97 x 0.98"] to cut-out 45 x 22.2 mm [1.77 x 0.94"]	black anthracite	<b>T008165</b> <b>T008180</b>	<b>N511015</b>
		<b>56 x 40 mm</b> [2.20 x 1.57"]	for cut-out 50 x 25 mm [1.97 x 0.98"] to cut-out 45 x 22.2 mm [1.77 x 0.94"] screw mounting	black anthracite	<b>T008161</b> <b>T008181</b>	<b>N511045</b>
		<b>72 x 36 mm</b> [2.83 x 1.42"]	for cut-out 68 x 33 mm [2.68 x 1.30"] to cut-out 45 x 22.2 mm [1.77 x 0.94"]	black and silver anodised as set	<b>162704Set</b>	–
		<b>60 x 50 mm</b> [2.36 x 1.97"]	for cut-out 54 x 29 mm [2.13 x 1.14"] to cut-out 45 x 22.2 mm [1.77 x 0.94"] screw mounting	black	<b>N003001</b>	<b>N511005</b>
		<b>48 x 48 mm</b> [1.89 x 1.89"]	for cut-out 45 x 45 mm [1.77 x 1.77"] to cut-out 45 x 22.2 mm [1.77 x 0.94"]	black	<b>T008883</b>	–
<b>Sealing cover IP65</b>		<b>K1</b>	only in conjunction with adapter front bezel 60 x 50 mm N003001	transparent / grey transparent / black	<b>G008300</b> <b>G008301</b>	–
<b>Transparent cover IP65</b>		<b>1 Dv</b> (mounted on bezel)	cover lockable, for cut-out 54 x 29 mm [2.13 x 1.14"], only in conjunction with adapter front bezel 60 x 50 mm N003001	transparent / black	<b>N003002</b>	<b>N511019</b>
<b>Gasket counter</b>			48 x 24 mm (for installation in adapter front bezel) 49 x 25 mm		<b>N511029</b> <b>N511034</b>	
<b>Mounting frame</b>		<b>cut-out</b> <b>50 x 25 mm</b> [1.97 x 0.98"]	via adapter T008180 for snap-on mounting on 35 mm [1.38"] top-hat DIN rail	chromated	<b>G300004</b>	–
<b>Enclosure blind</b>		<b>48 x 24 mm</b> [1.89 x 0.94"]	for cut-out 45 x 22.2 mm [1.77 x 0.94"] and cut-out 50 x 25 mm [1.97 x 0.98"]	anthracite	<b>G003836</b>	–

incl. in delivery

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### Technical data

General technical data	
Display	LCD, 8 digits, 8 mm [0.32"] high
Backlighting	external electrical source 24 V DC $\pm 20\%$ , 50 mA
Modes	adding or subtracting (selectable)
Display range	-9999999 ... 99999999, with overflow display
Reset	manual and electrical
Working temperature	-10 °C ... +55 °C [+14 °F ... +131 °F] (non-condensing)
Operating temperature	-10 °C ... +60 °C [+14 °F ... +140 °F] (non-condensing)
Storage temperature	-20 °C ... +70 °C [-4 °F ... +158 °F]
Relative humidity	< 85 % (non-condensing)
Altitude	up to 2000 m [6562']

Electrical characteristics	
Supply voltage	internal lithium battery approx. 8 years at 20 °C [68 °F]
Device safety	designed to EN 61010 part 1 protection class 2 application area pollution level 2

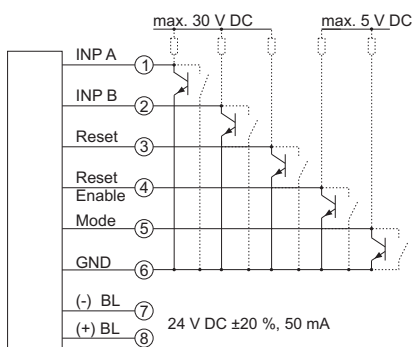
Mechanical characteristics	
Housing	dark grey RAL 7021
Protection	IP65 (front side)
Weight	approx. 50 g [1.76 oz]

Counting inputs	
<b>Counting input of the DC-versions</b> (max. 30 V DC)	
slow counting input	max. 30 Hz NPN
fast counting input	max. 12 kHz (PNP), 7 kHz (NPN)
switching level NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 30 V DC
switching level PNP	LOW 0 ... 0.7 V DC HIGH 4 ... 30 V DC
<b>Counting input of the high voltage versions</b> (10 ... 260 V DC/V AC)	
optocoupler input	max. 30 Hz
min. pulse time	16 ms
switching level	LOW 0 ... 2 V AC/DC HIGH 10 ... 260 V AC/DC
<b>Counting direction switching</b> (only DC-version)	
mode	adding / subtracting
contact input	open collector NPN (switching at 0 V)
switching level NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC
<b>Reset input</b> (only DC and high voltage)	
minimum pulse time	DC 50 ms high voltage 16 ms
contact input DC – NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 30 V DC
high voltage input	10 ... 260 V AC/DC
<b>Electrical reset key locking</b> (for DC and high voltage)	
contact input	open collector NPN (switching at 0 V)
switching level NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC

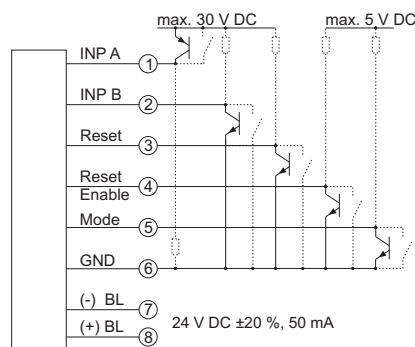
Approvals	
<b>UL compliant</b> in accordance with	File no. E128604
<b>CE compliant</b> in accordance with	
EMC Directive	2014/30/EU
RoHS Directive	2011/65/EU
Low Voltage Directive	2014/35/EU

### Terminal assignment

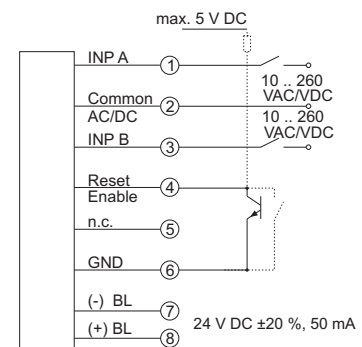
DC type: 6.130.012.8x0



DC type: 6.130.012.8x2



AC type: 6.130.012.8x3



BL = backlighting

# Pulse counters, electronic

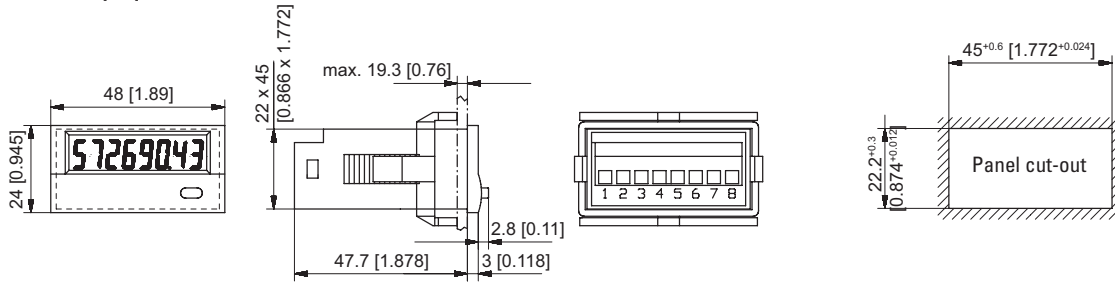
## LCD pulse counters

## Adding or subtracting (battery)

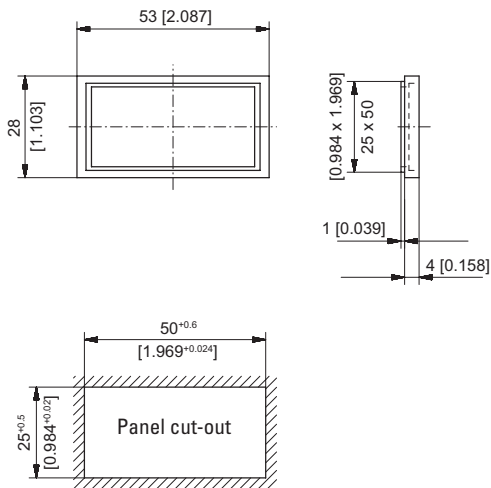
## Codix 130

### Dimensions

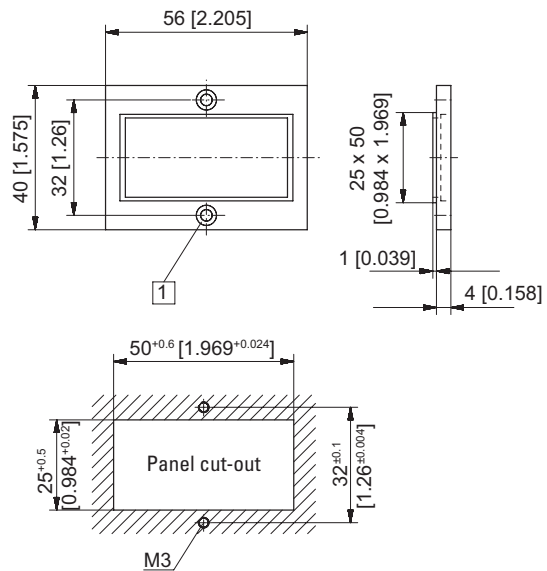
Dimensions in mm [inch]



### Front bezel for clip mounting (included in delivery)



### Front bezel for screw mounting (included in delivery)



□ Countersinking Af3, DIN 74