

Pulse counters, electronic

LCD modules

Adding, 7 digits (DC)

190

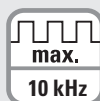


The single-channel count module type 190 for PCB mounting, with 2 voltage ranges (4.75 ... 15 and 9 ... 60 V DC) and large 7-digit LCD display, boasts a very wide temperature range.

This ensures the device is extremely robust and suitable for many application areas, even under the harshest operating conditions.



Power supply



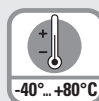
Max. count frequency



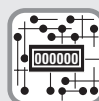
Input type



High shock resistance



Temperature range



PCB mount



LCD display



Electrical reset

Powerful

- Count frequency up to 10 kHz.
- 7-digit LCD display, 6 mm high.
- Low operating current.
- Wide operating voltage and temperature range.
- Very high shock and vibration resistance.

Simple

- Non-volatile memory (no battery).
- Single channel count input.
- Electrical reset.
- Very high reliability.
- Small size and very competitive price.

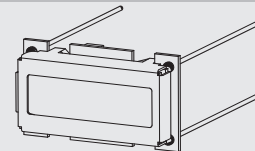
Order no.

Power supply
4.75 ... 15 V DC
9 ... 60 V DC

Order no.
6.190.012.F00 ¹⁾
6.190.012.G00

Art. no.
162 135
162 136

Delivery specification
· LCD counter module type 190
· Operating instructions



1) Stock types

Pulse counters, electronic

LCD modules	Adding, 7 digits (DC)	190
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Technical data

General technical data	
Display	7 digits, LCD display, figure height 6 mm [0.24"]
Data backup	EEPROM
Memory	CMOS EEPROM non-volatile memory data backup up to 10 years
Operating temperature	-40°C ... +80°C [-40°F ... +176°F] (non-condensing)
Working temperature	-20°C ... +80°C [-4°F ... +176°F] (non-condensing)
Storage temperature	-50°C ... +90°C [-58°F ... +194°F]

Inputs	
Count input	HIGH 4 ... 60 V DC LOW 0 ... 0.7 V DC
max. counting frequency	10 kHz, edge triggered (negative edge)
Reset input	HIGH 4 ... 60 V DC LOW 0 ... 0.7 V DC
pulse length	1 ms edge triggered (positive edge)

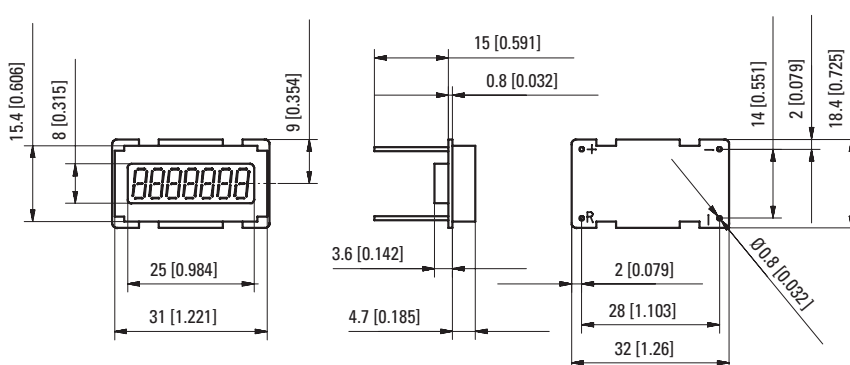
Pulse counters

Electrical characteristics	
Power supply	4.75 ... 15 V DC with reverse polarity protection 9 ... 60 V DC
Current consumption	8 mA at 4.75 ... 15 V DC 6 mA at 9 ... 60 V DC
EMC standards	EN 55011 class B EN 61000-6-2, EN 61000-6-3, EN 61326-1
The module must be protected against inductive voltage spikes and high energy noise interference.	

Mechanical characteristics		
Housing	dimensions	18.4 x 32.4 mm [0.72 x 1.28"]
	color	black
Weight		approx. 8 g [0.28 oz]
Shock resistance acc. to EN 60068-2-27		550 m/s ² , 11 ms
Vibration resistance acc. to EN 60068-2-6		50 ... 200 m/s ² , 10 ... 80 Hz

Dimensions

Dimensions in mm [inch]



Terminal assignment

