

## Technical Data

711

LCD Hour Meter, Counter, Tachometer, Voltmeter Modules



CR11 - Up Counter Standard P/N: **CR11B0A** (Up counter with reset and enable, 5-30 VDC/AC, 0.59in pins)

TR11 - Hour Meter Standard P/N: **TR11B0A** (Hour meter with reset and enable, 5-30 VDC/AC, 0.59in pins)

DR11 - Down Counter Standard P/N: **DR11B0A** (Down counter with reset and enable, 5-30 VDC/AC, 0.59in pins)

PT20 - Tachometer/Hour Meter Standard P/N: **PT20A0A** (Tach/Hour meter, 1 spark/revolution, 0.59in pins)

PT31 - Voltmeter Standard P/N: PT31AA (8.5-60 VDC/AC Voltmeter, 0.59in pins)

## Features

- Non-volatile memory (no battery required)
- High reliability
- Low cost and small size
- Low operating current
- Wide operating voltage range
- Silent operation, no moving parts
- Quartz crystal
- Solid State electronics
- Models with maintenance alert available

\*Please specify with our sales representative what function you want when ordering.

2019 ENM Co.®

ENM is proud to present our new LCD module with 5 available functions for our customer to choose from. We have the standard hour meter, up counter, down counter, tachometer or voltmeter to fit a wide range of application. They are compact size and are ideal for PCB mounting and in small area. Perfect for OEM applications, panel manufacturers and contract manufacturers.

These units use external power and are not dependent on battery. The data are stored using an onboard EEPROM memory chip and will not be lost should there be a power outage.

Specifications	
Capacity:	
Hour Meter	99999.9
Up Counter	(00 to 9999999)
Down Counter	(9999999 to 0)
Tachometer	0-30000RPM
	(1 spark/revolution)
	0-15000RPM
	(2 sparks/revolution)
Voltmeter	8.5-60 VDC/AC
	80-150 VDC/AC
	Automatic recycle to zero.
Display height:	0.205 in. (5.2mm) LCD
Operating Voltage:	5-30 VDC/AC
(Hour meter &Counter)	75-150 VDC/AC
	Other voltages available
Operating Current:	250-300uA
Count Speed:	50 C.P.S. (Counter model)
Timing Resolution:	0.1hr (6 minutes) (Hour meter)
Accuracy:	±0.01%
Operating Temperature:	14°F to 140°F (-10°C to +60°C)
Vibration:	10 to 75 Hz
Humidity:	95%RH +32C for 2 hours
Memory:	CMOS EEPROM. Non-volatile memory with data retention in excess of 25 years without power.



**ENM Company** 

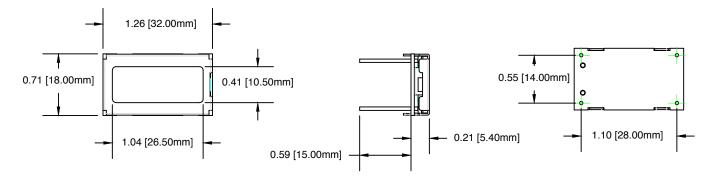
5617 Northwest Highway, Chicago, IL 60646-6135 (773) 775-8400 • Fax: (773) 775-5968

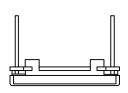
Toll Free (888) 372-0465 • e-mail: customerservice@enmco.com

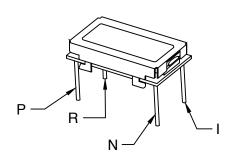
www.enmco.com

# Dimensional Data

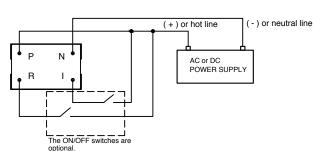
711



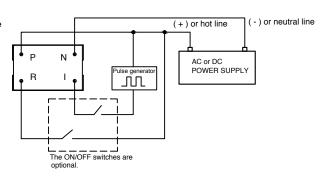




**TR11 Standard Connections** 



CR11 and DR11 Standard Connections



#### 2019 ENM Co.®

#### LIMITED WARRANTY

ENM Company products are warranted to the consumer to be free from defects in material and workmanship for a period of I year. All ENM products which fall within the warranty period due to defects in material or workmanship will be repaired or replaced, at ENM's option, without charge to the consumer when returned with proof of purchase to any authorized ENM dealer in the United States, transportation charges prepaid, provided there is no evidence of improper installation, tampering, or other abuse. All implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, shall be limited in duration to the express warranty period specified above. ENM disclaims any liability for consequential damages due to breach of any written or implied warranty on its products.



### **ENM Company**

5617 Northwest Highway, Chicago, IL 60646-6135

(773) 775-8400 • Fax: (773) 775-5968 • Toll Free (888) 372-0465

e-mail: customerservice@enmco.com

ISO 9001:2008 www.enmco.com