

Cardiac Trigger Module

With Synchronized Output For R-Wave Synchronization Applications

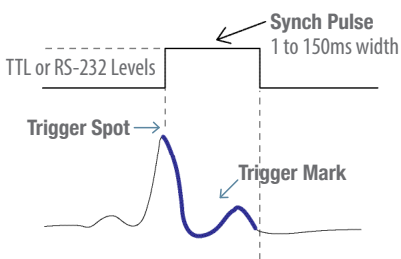
CTM-300



CTM-300 with custom designed case

Precision Triggering

The CTM-3000 Cardiac Trigger Module provides accurate cardiac triggering for use in synchronized applications such as Gamma Cameras, TMR/PMR, Multi-Slice CT, Heart Rate Variability Studies, Lithotripsy, and is also compatible with most major SPECT Cameras. The CTM-300's synchronized output produces a synch pulse starting at the peak of each R-wave. At the time of purchase, customers may choose RS-232 or TTL synch pulse output. Customers may also specify the pulse width of 1ms, 50 ms, 100 ms, or 150 ms.



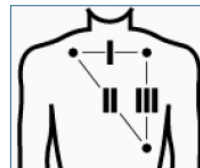
Please contact an IVY sales representative at 1-800-247-4614, to learn more about the CTM-300 Cardiac Trigger Module.

Simplified Operation

Once the patient cables are connected and the module is receiving an ECG signal, the circuit identifies the peak of the R-wave and generates accurate synchronization pulses. No adjustments are necessary.

Under Software Control

- ECG lead selection-Lead I, Lead II, or Lead III
- ECG amplitude
- ECG signal filtering On/Off
- Notch filter 50Hz or 60Hz
- Auto lead select
- Test Pulse



Features

ECG Notch Filter

The "Auto-Notch" feature selects the correct ECG notch filter, reducing interference on the ECG signal.

Compact and Light Weight

The module is small and light weight, allowing for easier mounting solutions and greater flexibility.

Universal Power Supply

Power input from 4 to 24 V DC.

Communication

RS-232 or TTL (customizable)

Configuration Options

- Respiration Gating
- Custom Accessories

Integration Solutions

Custom mounting and case design solutions are available. Please contact us more information or for custom requirements.

Electrocardiograph (ECG)

Lead Selection: LI, LII, LIII
 Patient Cable: 6-Pin AAMI Standard
 Ground Isolation: 4 kV rms, 5.5 kV peak
 CMRR: 90 dB
 Input Impedance: 20 M at 10 Hz with patient cable
 Frequency Response
 ECG output: Filtered: 0.5 to 35 Hz
 Unfiltered: 0.05 to 100 Hz
 Input Bias Current: Any lead configuration <200 nA dc
 Electrode Offset Potential: ± 0.5 V
 Noise: <20 μ V peak-to-peak, referred to input
 Defibrillator Protection: Protected against 360 J discharge
 Leakage Current: <10 μ A at 120 V ac, 60 Hz
 Electrosurgical Interference Protection: Standard

Synchronized Output

Phase Delay From Electrode Leads to Synchronized Output: < 5 ms
 R to R Trigger Accuracy: < 300 μ s
 Pulse Width: Standard 150ms
 Optional pulse widths available: 1 ms, 50ms or 100 ms (TTL compatible)
 Pulse Amplitude: Option of 0 to 5 V or ± 0 -11 V
 Sensitivity and Threshold Adjustment: Fully Automatic

Communications Options

RS-232 or TTL

Mechanical

Size: Height: 0.9 in. (2.1 cm)
 Width: 5.5 in. (14 cm)
 Depth: 3.5 in. (9 cm)
 Weight: 0.2 lb. (0.09 kg)

Environmental

Operating Temperature Range: 5°C to 35°C
 Storage Temperature Range: -5°C to 55°C
 Relative Humidity: 0-90% non-condensing

Power Requirements

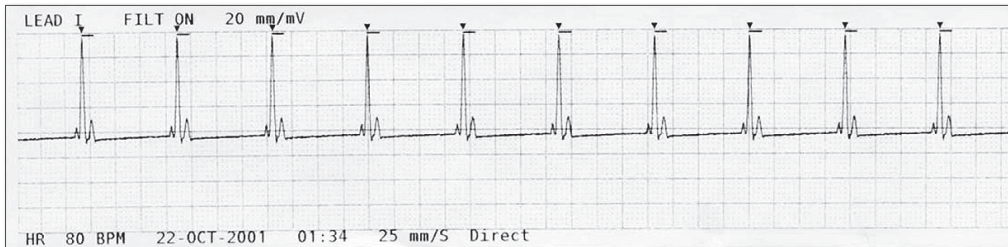
Input Range: 4 to 24 V DC
 Maximum DC Power Consumption: < 3W

Regulatory

Unit meets or exceeds the specifications and regulations for:
 IEC 60601-1-2:2014
 IEC 60601-2-27:2005
 ANSI/AAMI ES60601-1: A1:2012, C1:2009/(R)2012 and A2:2010/(R)2012
 CSA CAN/CSA-C22.2 NO. 60601-1:14
 IEC 60601-1 Edition 3.1 (2012) / EN 60601-1:2006 + A1:2013 + A12:2014
 CE
 ISO 13485:2016
 FDA/CGMP
 MDSAP


Warranty

One Year (parts and labor)



A representation of the possible output is shown here.

(Specifications subject to change without notice)

 For additional specifications, refer to Operator Manual



Manufactured by:



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