

CTM-300

With Synchronized Output For R-Wave Synchronization Applications



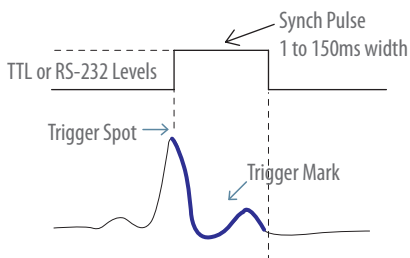
Cardiac Trigger Module



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.

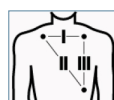


Simplified Operation

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

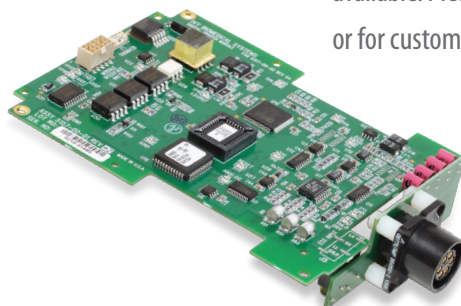
RS-232 or TTL (customizable)

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.



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

Technical Specifications

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:
 < 3 ms
 R to R Trigger Accuracy: ± 120 μ s typically
 Pulse Width: Standard 150ms
 Optional pulse widths available: 1 ms, 50 ms 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

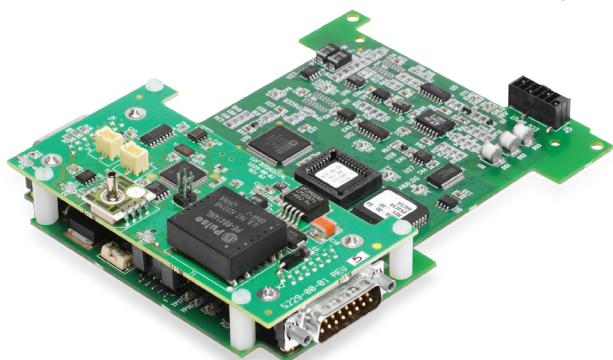
Input Range: 4 to 24 V DC
 Maximum DC Power Consumption: < 3W

Regulatory

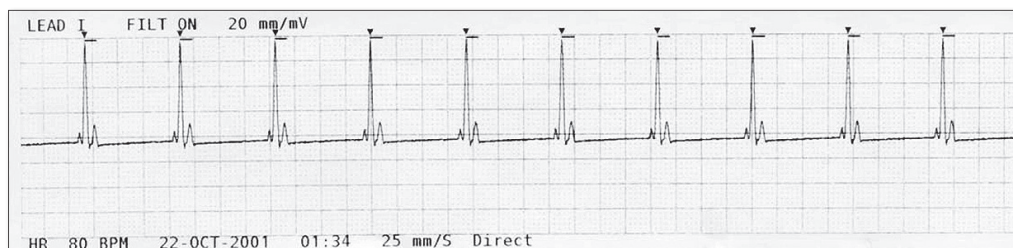
Unit meets or exceeds the specifications for FDA/CGMP, CMDCAS (CDN MDR), AAMI EC13 Cardiac Monitor Standard. ISO 13485:2003, UL 60601-1, and CE

Warranty

One Year (parts and labor)



CTM-300 configured
 with Respiration and CAN Open Option



(Specifications subject to change without notice)

A representation of the possible output is shown here.

Manufactured by:

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