# **High Resolution ECG**

## 1200HR - Accuracy at High Sampling Rate





The **1200HR** offers 16 Bit resolution with a very high sampling rate. Ideal for hospitals and research laboratories, it comes with an echo-ready trigger out for imaging and automatic BP devices. The 1200HR comes in two configurations that offer signal averaging and heart rate variability applications and delivers true 15 / 12 lead ECG solutions.

#### **AVAILABLE CONFIGURATIONS**

### 1200HR WITH TRIGGER OUT

12 LEAD STRESS ECG

- 16 Bit Resolution & High Sampling Rate
- Selectable Sync Lead
- Echo Ready Trigger Out
- Blood Pressure Equipment Interface

#### 1200HR

15 LEAD RESTING ECG

- 16 Bit Resolution & High Sampling Rate
- Late Potentials & Heart Rate Variability Applications\*

The 1200HR High Resolution Devices function independently as standalone applications or can be linked to the Norav Medical ECG Management System (NEMS).

### **FEATURES**

- High Resolution ECG Processing
- Clean & Stable ECG Traces
- Playback of Episodes
- Automatic Arrhythmia Detection
- Standard / unlimited custom-made, as well as
  Treadmill Test (TMT) Stress Test protocols
- Seamless Integration with HIS / EHR
- Straightforward Installation and User Friendly



<sup>\*</sup> Available for both the 1200HR and 1200HR with trigger out

Norav Medical's 1200HR High Resolution Devices offer excellent quality and accurate 12 / 15 lead PC-ECGs. The proprietary algorithm ensures very high-resolution ECG processing, which permits ST-measurements and arrythmia detection.





Feature		1200HR
Programs		Resting ECG, Stress ECG, Monitoring ECG, LP, HRV
Lead System		Standard 15 leads for Resting ECG / Standard 12 leads for Stress ECG
Patient Leads		Detachable 10 wires, AAMI compliant
Defibrillation Protection		Protected against 360 J discharge
Lead OFF Detection		Specific for each lead
Pacemaker Pulse Detection		± 2 to ± 700 mV at 0.1 to 2 ms width
Patient Leakage Current		< 10 μΑ
Ground Isolation		4 kV DC
Input Impedance		> 10 MΩ
Horizontal Scale		5, 12.5, 25, 50, 100 mm / sec
Signal Dynamic Range		± 2.4 V
DC Max. Input		± 2.4 V
Resolution		24 bits (0.286 μV / LSB)
Sensitivity		5, 10, 20, 40 mm / mV
ECG Sampling Rate (Samples /Second per channel)	Internal	8000 for ECG acquisition and pacemaker detection
		1000 in 12/15 lead Resting ECG and 12 lead Stress ECG mode
	Output ECG Data	2000 in 12 lead Monitoring ECG mode
		4000 in single channel Monitoring ECG mode
CMMR		> 90 dB
Frequency Range (-3db)		0.05 – 300 Hz
Low Pass Filter		20, 35, 40, 100 Hz
Base Line Filter		Yes
Line Noise Filter		50 / 60 Hz
Communication Protocols		USB
Power Supply		5 V ± 5%
Current Consumption		< 200 mA ± 10%
Size		170 x 90 x 30 mm (6.69" x 3.54" x 1.18")
Weight		300 gr (10.58 oz)
Safety Standards		IEC 60601-1; IEC 60601-2-25
Operating Temperature		10°C to 40°C (50°F to 104°F)
Storing Temperature		-20°C to 60°C (-4°F to 140°F)
Working Atmospheric Pressure		700 hPa ~ 1060 hPa
Storing Atmospheric Pressure		700 hPa ~ 1060 hPa
Humidity		10 – 95%

All Norav Medical products are ISO 13485, CE, 510(k) and Health Canada certified.



