# PHRMN-100 Polar™ Heart Rate Monitor

#### Overview

The PHRMN-100 Polar<sup>TM</sup> Heart Rate Monitor incorporates technology developed by Polar Electro, the leader in heart rate monitoring for the fitness industry, into the myDAQ system.

With the PHRMN-100, the voltage changes that take place during an electrocardiogram are picked up by two electrodes on the inside of a band around the subject's chest. These voltages are transformed into simple coded signals by the transmitter connected to the electrodes. The transmitter broadcasts the coded signals to a receiver that is connected to the data recording system. Since the frequency of the coded signals from the transmitter correspond to the heart rate of the subject, a periodic rate function in the recording software is used to convert the frequency of the coded signals into a display of the subject's heart rate. This technology enables relatively noise-free heart rate determination to be made from resting or exercising subjects.

### **Photo**



## **Specifications:**

Specifications	
Temperature Range:	0 - 50 deg C

### **Operating Instructions:**

**Equipment Setup** 

- 1) Plug the HRT-100 receiver into the mini phone jack of its MINIDIN7 adapter.
- 2) Plug the IX-MYDAQ adapter board into the NI myDAQ. Plug a USB cable into the top of the NI myDAQ.
- 3) Plug the MINIDIN7 connector into CH 1 or CH 2 of the IX-MYDAQ adapter and set the channel input to +/-5V.
- 4) Detach the WearLink™ coded transmitter from the sensor band.
- 5) Moisten the electrode areas of the sensor band under warm running water. Make sure these areas are well moistened.
- 6) Adjust the length of the sensor band to fit snugly and comfortably around the chest of the subject. Secure the sensor band around the subject's chest so that the electrodes are just below the chest muscles.
- 7) Attach the transmitter to the sensor. The Polar<sup>TM</sup> logo should be upright. Adjust the sensor band so that the transmitter is in the center of the chest.
- 8) Check that the wet electrode areas of the sensor band are firmly against the subject's skin.
- 9) Set up the receiver so that it is no more than 1 meter away from the transmitter. Use the supplied extension cable if necessary.
- 10) Press record.

### Accessories