



# DR181

*Digital Holter / OxyHolter / 12-Lead*



## Description

Large soft-keys, easy to read multi-line LCD and many foreign language options are among the features that distinguish the DR181 Holter Recorder. Extra battery capacity makes it ideal for long Holter studies of up to 72 hours (lithium batteries). Use either a 5- or 7-lead patient cable with the 3-channel configuration.

The DR181 recorder prevents identification mix-ups by storing Patient ID on removable media and units may be rapidly redeployed to the next patient while patient data is analyzed from the removable media.

## Applications

- Up to 72-hour Holter Monitoring
- 12-Lead ECG
- OxyHolter / Sleep Apnea

## Features

3-Channel Holter: 5-, 7- or 12- lead

12-lead / 9 Holter: No short-cuts! This 12-lead system does not use arithmetically derived or reconstructed data from non-standard Holter lead hook-ups.

OxyHolter® Recorder: Quickly isolate (or correlate) cardiac and pulmonary issues. With synchronized sets of data — one set of cardiac data (standard Holter) and one set of pulmonary data (saturated O<sub>2</sub> levels via pulse oximetry) conveniently obtained via the DR181 and NorthEast Monitoring's proprietary OxyHolter® cable.

## Availability

- Support and updates included under Warranty
- Extended Warranty and support available
- Contact us for European Availability

## Specifications

Sampling rate:	1440 samples/second
Resolution:	12-bit, 12.50 $\mu$ V/LSB
Recording bandwidth:	0.05- 70 Hz

## Physical Specifications

Dimensions:	12.3 cm x 7.0 cm x 2.4 cm (4-7/8 in x 2-3/4 in x 1.0 in)
Weight:	184 grams (6.5 oz) w/batteries and SD card; 136 grams (4.8 oz) w/o batteries

## Electrical Specifications

Data stored:	180 samples/second.
In high resolution mode, signal processing ensures capture of peaks of narrow QRS complexes	
Pacemaker sensitivity:	2 millivolts
Pacemaker pulse duration:	100 to 2,000 microseconds

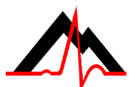
## Environmental Specifications

The operating range of the device is between 10 and 45 degrees C, between 10 and 95% humidity, and between 700 and 1060 hPa pressure.
Store and/or transport the recorder at temperatures between -40 and 70 degrees C, between 10 and 100% relative humidity, and 500 and 1060 hPa pressure. The recorder has an Ingress Protection Marking of IP22.

## Battery Specifications

2 AA batteries: alkaline, rechargeable or lithium

*Industry Leading 3-Year Warranty*



**NorthEast Monitoring, Inc.**  
*advancing Holter technology™*

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# DR181 OxyHolter

*A New Approach for Evaluation and Management of Cardiopulmonary Diseases*



Apnea: Manage O<sub>2</sub> therapy and screen for sleep disorders. Twenty-four hours of SpO<sub>2</sub> data correlated with 1 or 2 channels of cardiac data and optional airflow allow quantitative observations (value and trend) of response to O<sub>2</sub> variations. Proprietary tool removes artifact from HR and O<sub>2</sub> data.

OxyHolter® can be used with a Holter-only cable (3CH of ECG), an OxyHolter cable (2 CH ECG, 1CH of mux'd beat and SpO<sub>2</sub>) or an OxyHolter®/A cable (1 CH ECG, 1CH mux'd beat and SpO<sub>2</sub> and 1CH directly measured airflow). DME's can use OxyHolter® to substantiate or "fine tune" beneficiary's oxygen requirements. With an accurate tool like OxyHolter®, O<sub>2</sub> levels are optimized to determine replenishment schedules. The savings derived drop directly to the "bottom line" of a DME provider and quickly provide an ROI for OxyHolter.

OxyHolter® is designed with the following goals in mind:

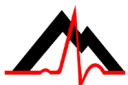
- 1) Ease-of-use – easy hookups, large LCD screen, big buttons, several language options
- 2) Accuracy of data – 95%+ sensitivity and specificity for OSA when compared to full PSG
- 3) Low cost of consumables – less than \$4 / patient OxyHolter® and \$5 / patient OxyHolter®/A
- 4) Durability – standard 3-year warranty, optional additional 2 years for total of 5 years

## DR181 12-Lead

*Digital 12-Lead Holter Recorder*

The DR181 in a 12-lead configuration provides a high quality research and clinical evaluation tool. It records 12-lead / 9 channels of data – no short-cuts! Our 12-lead system does not use arithmetically derived or reconstructed data from non-standard Holter lead hook-ups. These short-cut methods may capture accurate data for normal beats, but the picture degrades sharply for virtually all morphologies of interest. The DR181 12-lead settings can be adjusted to fit your 12-lead recording requirements. Intervals and strip lengths are adjustable, and you can also choose to record continuously in all 12-leads at a resolution of 12 bits per sample.

- Meets EC-11 and EC-38 standards
- Reduce artifact with shielded cables
- Proven reliability
- Foreign language interfaces
- All digital recording
- Pediatric (high sensitivity mode)
- Compatible with our HE/LX software
- Maximize Holter reimbursements



**NorthEast Monitoring, Inc.**  
*advancing Holter technology™*



NB: In the U.S.A., Federal Law restricts devices to sale by or on the order of a physician. Not for in vitro diagnostic use. Not intended to replace real-time telemetry monitoring for patients suspected of having life-threatening arrhythmias.