BI® **Mini Holter Recorder**

BI 9800TL+ Series Recorder

68 mm
16 mm
53 mm

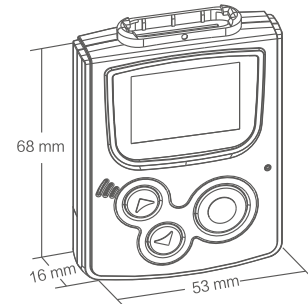## Highlight Features

Recording: 12-lead or 3-channel ECG

Compact size: 68 mm x 53 mm x 16 mm

Operating time: Up to 7 days

Sampling rate: Up to 1024 Hz / 16 Bit

Display: LCD, 128 x 64 dot matrix

Storage medium: Removable SD card

Data transfer: Hi-Speed USB, Card reader

Pacemaker detection: Yes

Features

- **Compact Size, Light Weight**
  68mm × 53mm × 16mm
  42 grams (battery not included)

- **Fully Programmable, High Fidelity, Research Grade Performance**
  Sample rate up to 1024 samples per second
  No data compression
  8, 10, 12 or 16 bit resolution

- **Multifunction**
  3 or 8,bipolar or unipolar channels,automatic selection via patient cable.

- **Removable SD Card**
  2GB records up to 168 hours of 3-channel ECG

- **128x64 Dot Matrix LCD Display**
  Visual confirmation of patient hook up
  Provides on demand ECG review of all channels
  Confirms programming instructions before recording

- **Programmable Pacemaker Detection**
  Real time detection and display of pacemaker pulse

- **Lower Power Consumption**
  Powered by single AAA battery
  24h, 48h or 7 days of full disclosure

- **Multi-languages Available**

BI® Mini Holter Recorder
BI 9800TL+ 12 / BI 9800TL+ 3 / BI 9800TL+ 7D

Technical Data

■ BI 9800TL+12 only   ■ BI 9800TL+3 only   ■ BI 9800TL+7D only

General

Dimensions	68 mm x 53 mm x 16 mm
Weight (w/o battery)	42g
Battery	1 x 1.5V Alkaline (LR03 /AAA)
	1 x 1.2V NiMH (AAA)
	1 x 1.5V Lithium (FR03/AAA)
Operating time	■ 48 h ■ 96 h ■168 h
Controls	3 keys, multi-lingual
Display	LCD, 128 x 64 dot matirx
Connectors	Patient cable
	data transfer (USB)
Available patient cables	■ ■ 4 Leads,3 bipolar channels (CH1=CM5,CH2=CC5,CH3=CM5R)
	■ ■ 5 Leads,3 bipolar channels (CH1=CM5,CH2=aVF,CH3=lead Ⅱ)
	■ ■ ■5 Leads,3 unipolar channels (CH1+,CH2+,CH3+,COM-,RL)
	■ ■ 7 Leads∗,3 indepenent bipolar channels(CH1±,CH2±,CH3±,RL)
	■10 Leads ∗ (Einthoven,Goldberger,Wilson leads)

Parameters

Lower cut-off frequency	0.05 Hz
Upper cut-off frequency	60 Hz
Input dynamic range	± 5 mV
Offset voltage range	± 300 mV
Pacemaker detection	Unipolar, bipolar and biventricular systems
Pulse width	0.1 ~ 2 ms
Pulse amplitude	2~200mV
Lead-off detection	Yes

∗ Complies with AHA/IEC Standard

Memory

Storage type	Removable SD card
Sampling rate	1024 Hz
Resolution	8Bit / 10Bit / 12Bit / 16Bit
Data storage	Max. ■ 512 Hz ■ ■ 1024 Hz
Memory capacity	≤ 32G
Data transfer mode	Hi-Speed USB 2.0
Data transfer time	< 10 s (for 24h ECG)

Classifications

Product classification	Ⅱa in accordance with 93 / 42 / EEC
Classification of applied part	Type CF (Cardiac Floating)
UMDNS code	12-388

Operating conditions

Temperature	5 ~ 45 °C
Relative humidity	10 ~ 95 %, non-condensing

Storage and transport conditions

Temperature	–20 ~ 65 °C
Relative humidity	5 ~ 95 %, non-condensing

ISO9001: 2008
ISO13485 : 2012

0123

BI ® **Sprite Holter Recorder**

BI 6600 Series Recorder
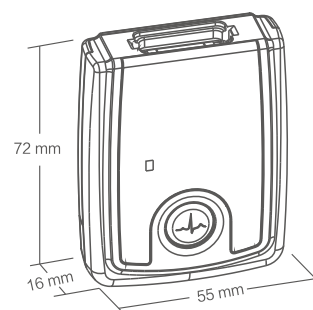
Highlight Features

Recording: 12-lead or 3-channel ECG	
Optional SPO$_2$ *	
Compact size: 72 mm x 55 mm x 16 mm	
Operating time: Up to 7 days	
Sampling rate: Up to 1024 Hz/16 Bit	
Storage medium: Removable SD card	
Data transfer: Hi-Speed USB, Card reader, Bluetooth® *	
Pacemaker detection: Yes	

Items with * are optional advanced functions.

72 mm

16 mm

55 mm

Features

● **Compact Size, Light Weight**
  72mm × 55mm × 16mm
  45 grams (battery not included)

● **Fully Programmable, High Fidelity, Research Grade Performance**
  Sample rate up to 1024 samples per second
  No data compression
  8, 10, 12 or 16 bit resolution

● **Multifunction**
  3 or 8,bipolar or unipolar channels,automatic selection via patient cable.

● **Lower Power Consumption**
  Powered by single AAA battery
  24h, 48h or 7 days of full disclosure

● **Removable SD Card**
  2GB records up to 168 hours of 3-channel ECG

● **Programmable Pacemaker Detection**
  Real time detection and display of pacemaker pulse

● **24 Hours SPO$_2$ Measurement** *
  Sensor of forehead or finger

● **Wireless Transmission***
  Visual confirmation of patient hook up
  12-lead or 3-channel ECG preview on PC

BI® Sprite Holter Recorder

BI 6600-12 / BI 6600-3 / BI 6600-7D

Technical Data

■ BI 6600-12 only   ■ BI 6600-3 only   ■ BI 6600-7D only

General

Dimensions	72 mm x 55 mm x 16 mm
Weight (w/o battery)	■ 47g ■ ■ 45g
Battery	1 x 1.5V Alkaline (LR03 /AAA)
	1 x 1.2V NiMH (AAA)
	1 x 1.5V Lithium (FR03/AAA)
Operating time	■ 48 h ■ 96 h ■ 168 h
Controls	Single key
Connectors	Patient cable USB data transfer
Available patient cables	■ ■ 4 Leads, 3 bipolar channels (CH1=CM5,CH2=CC5,CH3=CM5R) ■ ■ 5 Leads, 3 bipolar channels (CH1=CM5,CH2=aVF,CH3=lead Ⅱ) ■ ■ ■ 5 Leads, 3 unipolar channels (CH1+,CH2+,CH3+,COM-,RL) ■ ■ 7 Leads∗, 3 indepenent bipolar channels(CH1±,CH2±,CH3±,RL) ■ 10 Leads∗ (Einthoven,Goldberger,Wilson leads)

Parameters

Lower cut-off frequency	0.05 Hz
Upper cut-off frequency	60 Hz
Input dynamic range	± 5 mV
Offset voltage range	± 300 mV
Pacemaker detection	Unipolar, bipolar and biventricular systems
Pulse width	0.1 ~ 2 ms
Pulse amplitude	2~200mV
Lead-off detection	Yes

∗ Complies with AHA/IEC Standard

Memory

Storage type	Removable SD card
Sampling rate	1024 Hz
Resolution	8Bit / 10Bit / 12Bit / 16Bit
Data storage	Max. ■ 512 Hz ■ ■ 1024 Hz
Memory capacity	≤ 32G
Data transfer mode	Hi-Speed USB 2.0
Data transfer time	< 10 s (for 24h ECG)

Wireless transmission∗

Wireless transmission	Bluetooth® 2.0 + EDR, Class 2
Range (free field)	Min. 5 m
HF frequency range	2.4 ~ 2.5 GHz ISM-Band HF
Output	0.5 ~ 4.5 dBm

Classifications

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Operating conditions

Temperature	5 ~ 45 °C
Relative humidity	10 ~ 95 %, non-condensing

Storage and transport conditions

Temperature	–20 ~ 65 °C
Relative humidity	5 ~ 95 %, non-condensing

Items with * are optional advanced functions.

BI® Smart Holter Recorder

BI 6800 Series Recorder

72mm

16 mm

55 mm

Highlight Features

Recording: 12-lead or 3-channel ECG	
Compact size: 72 mm x 55 mm x 16 mm	
Operating time: Up to 7 days	
Sampling rate: Up to 1024 Hz/16 Bit	
Display: LCD, 128 x 64 dot matrix	
Storage medium: Removable SD card	
Data transfer: Hi-Speed USB, Card reader	
Pacemaker detection: Yes	

Recommended recorder for pacemaker detection.
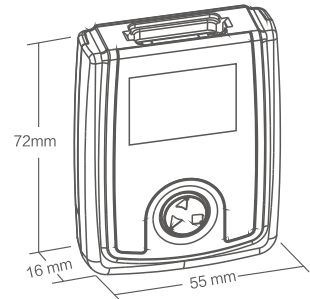
Features

- **Compact Size, Light Weight**
  72mm × 55mm × 16mm
  48 grams (battery not included)

- **Fully Programmable, High Fidelity, Research Grade Performance**
  Sample rate up to 1024 samples per second
  No data compression
  8, 10, 12 or 16 bit resolution

- **Multifunction**
  3 or 8,bipolar or unipolar channels,automatic
  selection via patient cable.

- **Removable SD Card**
  2GB records up to 168 hours of 3-channel ECG

- **128x64 Dot Matrix LCD Display**
  Visual confirmation of patient hook up
  Provides on demand ECG review of all channels
  Confirms programming instructions before recording

- **Programmable Pacemaker Detection**
  Real time detection and display of pacemaker pulse

- **Lower Power Consumption**
  Powered by single AAA battery
  24h, 48h or 7 days of full disclosure

- **Multi-languages Available**

$BI^®$ Smart Holter Recorder

BI 6800-12 / BI 6800-3 / BI 6800-7D

Technical Data

■ BI 6800-12 only   ■ BI 6800-3 only   ■ BI 6800-7D only

General

Dimensions	72 mm x 55 mm x 16 mm
Weight (w/o battery)	■ 49g
	■ ■ 48g
Battery	1 x 1.5V Alkaline (LR03 /AAA)
	1 x 1.2V NiMH (AAA)
	1 x 1.5V Lithium (FR03/AAA)
Operating time	■ 48 h ■ 96 h ■ 168 h
Controls	3 keys, multi-lingual
Display	LCD, 128 x 64 dot matrix
Connectors	Patient cable
	USB data transfer
Available patient cables	■ ■ 4 Leads,3 bipolar channels (CH1=CM5,CH2=CC5,CH3=CM5R)
	■ ■ 5 Leads,3 bipolar channels (CH1=CM5,CH2=aVF,CH3=lead Ⅱ)
	■ ■ ■ 5 Leads,3 unipolar channels (CH1+,CH2+,CH3+,COM-,RL)
	■ ■ 7 Leads∗,3 indepenent bipolar channels(CH1±,CH2±,CH3±,RL)
	■ 10 Leads∗ (Einthoven,Goldberger,Wilson leads)

Parameters

Lower cut-off frequency	0.05 Hz
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Storage and transport conditions

Temperature	–20 ~ 65 °C
Relative humidity	5 ~ 95 %, non-condensing

Recommended recorder for pacemaker detection.

ISO9001: 2008
ISO13485: 2012

$C\epsilon$ 0123

ECGLab
Holter Software

About Us

Since its founding in 1993, Biomedical Instruments(BI) has focused on R&D and manufacturing of Holter System. After 20 years of hard work,BI has become China's most competitive professional Holter System manufacturer.

- World-class Holter ECG developer & OEM provider
- Exported to more than 60 countries
- CE, ISO9001 & ISO13485 Certificates
- Testing against MIT and AHA database, QRS detection is 99.8% accurate.

System Composition

Holter System is composed of computer, printer, ECGLab Software and Holter recorder.

ECGLab Highlights

- Multi-channel Analysis
- QRS Template Classification
- Automatic Arrhythmia Analysis
- ST Segment Measurement
- Pacemaker Analysis
- Lorenz Plot Edit*
- A-Fib Detection and Edit
- Waterfall Tools on A-Fib Edit*
- HRV Analysis
- HRT Analysis
- T-wave Alternans*
- Deceleration Capacity of Heart Rate*
- Late Potentials (SAECG)*
- QT Analysis
- Vectorcardiogram (VCG)*
- Obstructive Sleep Apnea (OSA) Syndrome Analysis
- Available Multi-user Analysis
- Powerful Database Management Function
- Fully networkable using BI Cardiology Information System(CIS)
- Support HL7*/XML/DICOM*/GDT
- Seamless Connectivity to HIS

Items with * are optional.

Software Package

Security key	1pc
Installation CD	1pc
USB cable	1pc
SD card reader*	1pc
Operation manual	1pc

Items with * are optional.

PC Specification Requirements

Processor: Intel Pentium 2.8G or above	
RAM: 2GB or above	
Hard Drive Capacity: 320G or above	
Operating System: Windows 2000/XP/7/8	
USB Ports: 2 free or more	
Network Interface: 10/100/1000	
Archive: CD-RW/DVD-RW	
Minimum Graphics: 1024*768	
Printer: Laser printer	
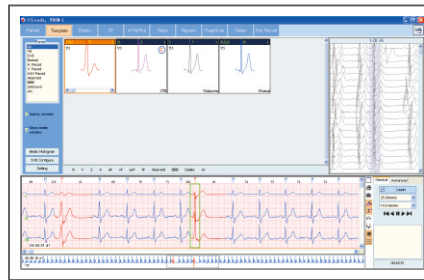
QRS Template Classification
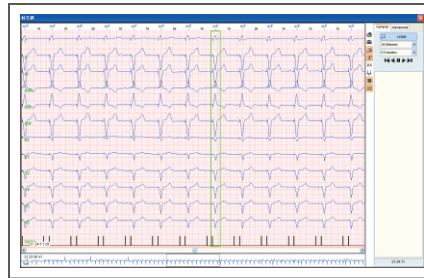
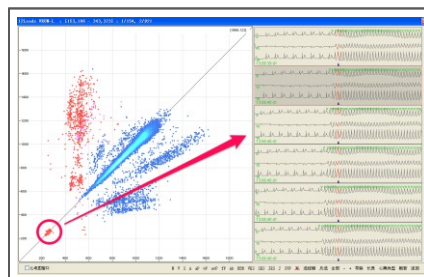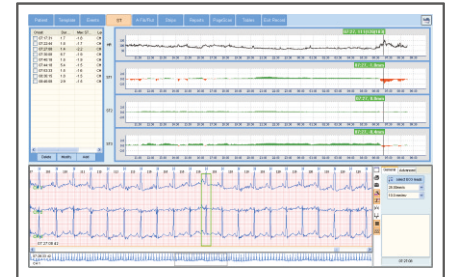
Pacemaker Analysis
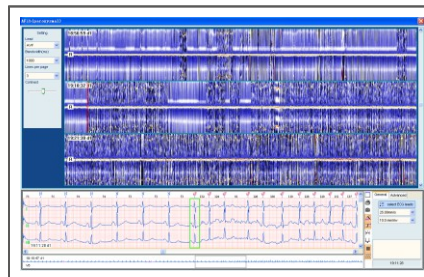
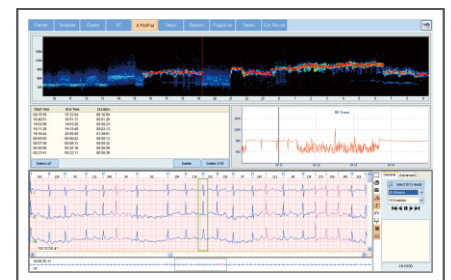Waterfall Tools on A-Fib Edit*
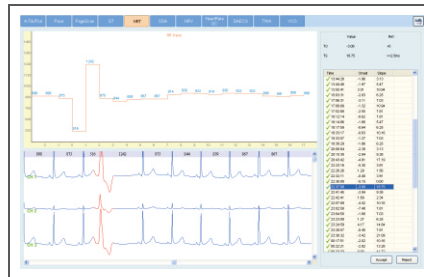
HRT Analysis
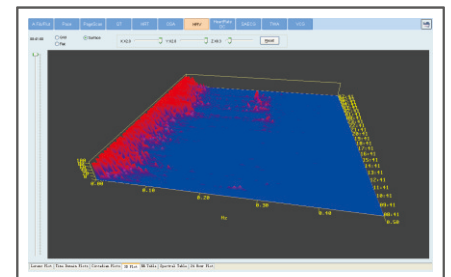

Lorenz Plot Edit *
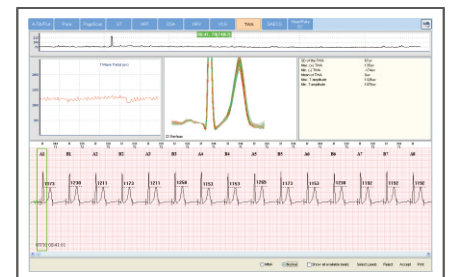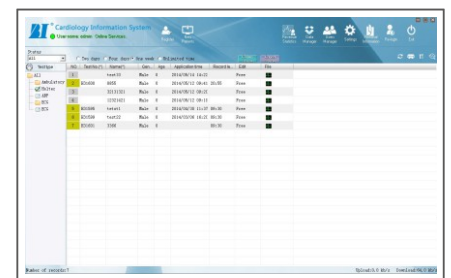

ST Segment Measurement

A-Fib Detection and Edit

HRV Analysis

T-Wave Alternans *

BI Cardiology Information System(CIS)*