

# BRH-100

## Handheld Bidirectional Loss Tester



### Product Overview

Santec's BRH-100 Bidirectional Loss Tester combines several essential fiber optic measurement tools in a rugged handheld package for fast and precise bi-directional Tier 1 certification and reporting of single-mode and multi-mode optical fibers. Its advanced features and automated test process eliminates setup, training, and measurement errors, maximizing productivity and accuracy when qualifying networks with multiple wavelengths and fiber types. Using a pair of BRH-100 instruments in autotest mode, two-way insertion loss can be displayed in real time at multiple wavelengths using one test hook up per fiber and a single press of a button. Fiber length and optical return loss (ORL) measurement options are also available in the BRH-100, resulting in a powerful and comprehensive test solution for fiber optic administrators, installers, and technicians. The BRH-100 can also be used as a stand-alone optical light source or loss meter, allowing it to be used with Santec's OPH-100 handheld optical power meters and SLH-100 handheld optical light sources. By looping together the light source and power meter ports, a single BRH-100 can be used in one-way autotest mode to perform loss testing for up to three wavelengths.

### Features

- One touch bidirectional tier 1 fiber certification
- Eliminates administration, training, and testing errors
- Displays measurements at both ends in real time
- Wide range of available configurations
- Compatible with other Santec handheld instruments
- Multi-fiber ID
- Large internal memory
- Optional Visual Fault Locator (VFL)
- Interchangeable connectors are protected against drops and impact

### Applications

- Field insertion loss and return loss testing
- Link length measurement
- Field polarity testing
- Simplex, Duplex and MPO/ MTP ILRL Testing
- Fiber identification

### Compliance

- IEC-61300-3-4

### One Touch Bidirectional Tier 1 Fiber Certification

In two-way autotest mode, a pair of BRH-100 instruments can fully qualify a single-mode or multi-mode fiber in as fast as 5 seconds with one hookup and a single press of a button. Results can be exported in real time into a standards compliant Excel-based test report when connected to a PC.

### Eliminates Administration, Training, and Testing Errors

Automated test process uses the same method for all fibers in a network for more productivity and fewer mistakes. Simplified setup in autotest mode eliminates the need to specify master and slave instruments.

### Displays Measurements at Both Ends in Real Time

In autotest mode, measurement information is summarized simultaneously on the instruments at both fiber ends via a comprehensive LCD display. The high contrast display is backlit and can be read in bright sunlight for use underground or outside.

### Wide Range of Available Configurations

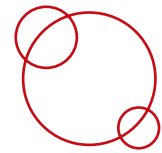
The BRH-100 can be specified with optional fiber length testing, optical return loss (ORL) testing, a visual fault locator (VFL), and ultra-stable zero warm up time light sources, putting the accuracy and versatility of a fiber optics lab in the palm of your hand. The optional ORL meter includes a full range of features and can be operated in stand-alone mode or integrated with the autotest mode.



## In the Box

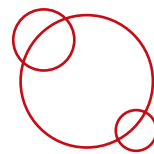
### **BRH-100** - Handheld Bidirectional Loss Tester

- BRH-100
- Optical power meter adapter
- 2 AA batteries
- Rugged case
- Lanyard



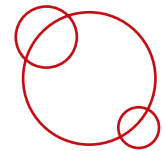
## Compatible With Other Santec Handheld Instruments

The BRH-100 is fully compatible with Santec's OPH-100 handheld optical power meters and SLH-100 handheld optical light sources with matching wavelengths, extending your range of test capabilities with fewer equipment upgrades.



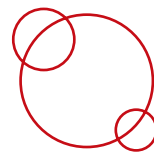
## Multi-fiber ID

The BRH-100 can identify up to 12 different fibers, in addition to standard optical test tones, i.e., 270 Hz, 1 KHz, and 2 KHz, when used with another BRH-100 bidirectional loss tester or SLH-100 handheld optical light source. This makes continuity testing, polarity testing, and fault finding fast and reliable.



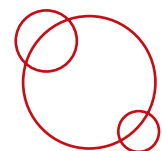
## Large Internal Memory

The BRH-100 internal memory records up to 8,000 tests with the date, time, and essential information including the reference value in dBm, detected wavelength in nm, autotest nominal source power, remote instrument serial number, and pass/fail status. Users can input and store up to 20 cable text ID tags using the front panel controls and recall them for easy reference.



## Interchangeable Connectors are Protected Against Drops and Impact

The BRH-100 accommodates a wide variety of industry standard fiber optic connectors, including FC, ST, LC, MU, HFBR, LSADIN47256, and E2000. Built-in bumpers and an integral dust cover protect the connector interface against damage and contamination. The dust cover doubles as a stand when used on a benchtop or other surface.



## Optional Visual Fault Locator (VFL)

The BRH-100 can be ordered with an optional 650 nm Visual Fault Locator (VFL) with an output power of -1 dBm  $\pm$ 1 dB into single-mode and multi-mode fibers. Two-way autotest blinks the active test fiber, making it obvious to the user, and is mixed with a test tone for use with clip-on fiber identifiers. The Visual Fault Locator also quickly flags fiber breaks, bad splices, pinched fibers, bending losses, and cracked connector ferrules with bright red light escaping from the defect.



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