

# HAND-HELD CONTROLLER HHC-1

## Hand-Held Controller for PULSAR Relay Test Sets



- **Remotely performs the same functions as the front panel of the PULSAR Relay Test Set.**
- **Physically separates the user from the test set to permit closer observation of the device under test**
- **Dynamic testing capability without computer software**
- **Stores and Recalls up to 32 pre-set test files**
- **Menu driven user interface is easy to use**

### DESCRIPTION

The Hand-Held Controller (HHC-1) unit is a lightweight controller designed to remotely control a Pulsar's front panel functions and to enhance its manual relay testing capability.

The Hand-Held Controller physically separates the user from the PULSAR Relay Test System and allows closer observation of the device under test. The Hand-Held Controller HHC-1, with its non-volatile EPROM, is able to save and recall up to 32 pre-set files based on particular test parameters.

The digital adjustable knob provides an easy method to set up test values and eliminates having to enter multiple keystrokes.

The easy-to-use user interface is menu-driven with all operations accomplished through direct keystrokes.

Other important features include dynamic testing (Pre-Fault to Fault) and automatic ramping capabilities without the need for any computer hardware or software.

### APPLICATIONS

The Hand-Held Controller HHC-1 is an ideal instrument for manually testing generation, transmission, and distribution type relays. The unit, with its digital adjustable knob, is designed to make setting test values easier and manual testing of protective relays faster.

The HHC-1 has simultaneous or independent control of voltage, current and phase angle allowing the operator to conduct multiple fault testing of protective relays.

Combined with the ability to save and recall up to 32 pre-set files, the HHC-1 allows the operator to pre-set relay parameters before testing commences in the field.

### FEATURES AND BENEFITS

- Acts as an extension of the front panel functions of the PULSAR
- Digital Adjustable Knob eliminates having to enter multiple front panel keypad strokes to set up test values.
- Save and Recall up to 32 individual pre-set test files without computer driven software.
- Output voltage, current and phase angles are independently or ganged controlled.
- Performs dynamic tests allowing the operator to switch from a Pre-Fault to Fault condition without a computer or additional software.
- Automatic ramping enables the user to adjust ramping rate without additional software.

**SPECIFICATIONS**

**Hand-Held Controller Interface**

Through coil cable with six pin phone jack to the RS 232 converter box

**Parameter Storage**

EPROM

**Display**

7 line by 20 character LCD display

**Keypad**

29 key membrane keypad

**Enclosure**

Molded, high impact plastic

**Dimensions**

8 5/16 H X 4 W X 0.95 D in.  
(21 H X 10.2 W X 2.4 D cm)

**Weight**

11 oz  
(320 g)

**Environmental**

**Operating temperature:** 0° to 50° C

**Storage temperature:** -20° to 70° C

**Operating Humidity:** 10 to 90% RH, non-condensing

**RS232 Converter Box**

**Input**

115-240 VAC, 50/60 Hz

**Interface**

RS232

Six pin phone jack

**Terminal Box**

Terminal box is housed in a rugged high impact design aluminum steel enclosure.

**Dimensions**

2 5/4 H X 1 5/16 W X 1 5/8 D in.  
(5.6 H X 3.3 W X 2.8 D cm)

**Weight**

2.4 oz. (68 g)

Coiled Cable



Power Supply



RS 232 Converter Box



Carrying case



**ORDERING INFORMATION**

Item (Qty)	Part No.
Hand-Held Controller	HHC-1
<b>Included Accessories</b>	
Carrying case (1)	MC6674
RS 232 converter box (1)	50996
Coiled cable (1)	51022
Instruction manual (1)	51760
Power supply (1)	51829
Power cord	6828

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