# M-140 / M-142 Series Options and Accessories



#### Option 140-01 Cable Adapter for M-140 / M-142 models

140-01 cable adapter is designed for easy connection of unit under test to M-140/M-142 multifunction calibrator. Basic part of the adapter is metal working pad with integrated voltage and current outputs with banana ends. The adapter is connected to the calibrator via front panel AUXILIARY connector and main output terminals. On bottom side it contains mounted Pt100 temperature sensor through which ambient temperature is measured and value is applied for automatic compensation of cold junction temperature of simulated thermocouples.

Application: multimeter, ammeter, voltmeter calibration

Dimensions: 230mm x 75mm x 290mm

Weight: 1 kg

Connection: safety Ø 4mm banana

# Option 140-41 Cable Adapter for M-140 model

Cable adapter Option 140-41 is especially suitable for process and simultaneous calibrations. It enables to apply all input and output functions of the M-140 multifunction Calibrator with output/input located on the AUXILIARY output connector on the calibrator front panel. Typical application is calibration and testing of such meters and transducers who need simulation of temperature sensors on the input side and measuring of output signal 20 mA/10V on the output side. When used in TESTER mode, additional relay contact of type PASS/FAIL is located on the adapter.

Application: Strain gauge sensor measuring

Voltage/Current/Resistance/Frequency measuring

Simultaneous calibration and measurements

Dimensions / Weight: 105mm x 50mm x 170 mm / 0.5 kg



## Option 10/11 Test Cable

Standard test cable black/red with length 1m dimensioned for signals to 1000 V and 20 A

#### **Option 20 Test Cable**

Standard test cable BNC – BNC length 1 m for calibration on frequency ranges.

#### **Option 30 Test Cable**

Standard test cable BNC – 2 x Banana, length 1 m, for calibrations on frequency ranges.

#### **Option 40 Cable Adapter**

Cable adapter CANON 25-2 x Banana. With the adapter external source of signal can be measured with internal build-in multimeter. Option 40 enables measuring of DC voltage to 12 V, DC current to 25 mA, frequency to 15 kHz and temperature of TC temperature sensors.



Cable adapter CANON  $25-4\,x$  Banana. Four terminal resistance measurement in build-in meter is accessible with the adapter. The option enables also direct measuring of ambient temperature via external RTD temperature sensors.



Cable adapter CANON  $25-4\,x$  Banana. Four-terminal output in resistance mode of M-140 is accessible with the adapter. Four-terminal output is more accurate than front panel output, especially for low resistance values.

# **Option 80 Adapter**

Cable adapter CANON  $25 - 2 \times Banana$ . Two terminal input for direct measurement of low level DC voltage bellow 2 V and for measuring of temperature using external thermocouple sensor. Applicable with M-142 calibrator only.









## Option 90 Pt100 External Temperature Sensor

Cable adapter CANON  $25 - 4 \times Banana$ . Four-terminal output in resistance mode of M-140 is accessible with the adapter. Four-terminal output is more accurate than front panel output, especially for low resistance values.





# Option 100 3/4" Terminals

Cable adapter for distance change between front panel terminals to ¾ inch.



## **Option 140-50 Current Coil**

25/50 turns current coil for calibration of clamp ammeters. Maximal range 1000 A.

# Option 140-02 Cable Adapter Set for M-140 calibrator

The set 140-02 consists of following accessory:

Option 10	Test cable black	2 pcs
Option 11	Test cable red	2 pcs
Option 20	Test cable BNC-BNC	1 pc
Option 30	Test cable BNC-bannana	1pc
Option 140-01	Cable adapter	1pc
Option 140-41	Cable adapter	1pc

#### RS232 Cable

Interface cable RS232 2m length

### **GPIB Cable**

Interface cable GPIB 2m length

# Applicability of the options

Option	M140	M140i	M141	M142	M142i
Option 10/11	Y	Y	Y	Y	Y
Option 20	Y	N	N	Y	N
Option 30	Y	N	N	Y	N
Option 40	Y	N	N	Y	N
Option 60	Y	N	N	Y	N
Option 70	Y	N	N	N	N
Option 80	N	N	N	Y	N
Option 90	N	N	N	Y	N
Option 100	Y	Y	N	Y	Y
Option 140-50	Y	Y	Y	Y	Y
Option 140-01	Y	N	N	Y	N
Option 140-41	Y	N	N	N	N
Option 140-02	Y	N	N	N	N
RS232 cable	Y	Y	Y	Y	Y
GPIB cable	Y	N	Y (GPIB	Y	N
			version)		