



### MODEL 66252 FEATURES

- ◆ Allows System Resistance Standard to be used as Resistance Source
- ◆ Available in Bench Configurations (No Modification to 6625AF System)
- ◆ Usable Resistance Range  $1\Omega$  to  $100\text{ M}\Omega$
- ◆ Input Impedance  $>10^{14}$
- ◆ Includes Scanner Low Thermal Short
- ◆ Software Utilities available
- ◆ Includes lead compensation procedures for low resistance connection to long scale DMM's.
- ◆ Use on any 6625 System including AF Models
- ◆ Easy to Use, Easy to Install. Can be field installed with minimal tools.
- ◆ Wide Operating Range  $18^{\circ}\text{C}$  to  $28^{\circ}\text{C}$
- ◆ Use with any Number of Scanners

Guildline Instruments Limited is pleased to introduce the 66252 DMM Switch for all versions of the 6625 system including the widely fielded 6625AF.

This option allows operators new flexibility from the 6625 Measurement system. For example, the Guildline Model 6634A Temperature Stabilized Resistance Standard, with up to 10 available Resistance Standards, is typically hard-wired on 10 channels of the 6664 Series scanners. It is normally difficult or time consuming to remove all the cabling and wires if an operator simply wanted to use the Resistance Standard as a source for items such as artifact calibrations, high accuracy DMM's and other metrology situations.



When installed, the DMM Switch allows the 6625 operator to use the System either in a measurement configuration against the 6622 Series Bridge or allows the 6634A resistance values to be used as a Standard output on any available free scanner channel without having to change wires or remove cables.

### **Now use your 6625 System Resistance Standards for both Measurement and Source Applications without having to disconnect and reconnect wires.**

The DMM Switch isolates the 6622 DCC Bridge from the 6625 system and joins the  $R_s$  and  $R_x$  scanner channel lines together. This allows you to connect the DMM to any free  $R_x$  channel (Line B) and use the  $R_s$  channels (Line A) to select the resistance values to be referenced.

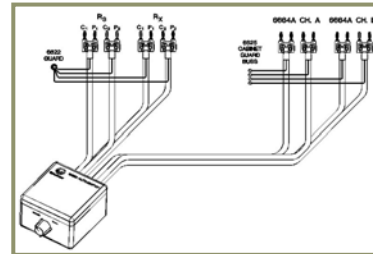
To use with the 6625 System 6622 Series Bridge, simply turn and set the DMM Switch to "Bridge" (Measure) and operators have a wide measurement range from  $1\text{ }\mu\text{Ohm}$  to  $100\text{ Mohms}$ . However, if the operator wishes to use the 6634A Resistance Standards (or others) as a source to calibrate high end DMM's, simply set the DMM Switch to "DMM" (source) and you now have your resistance standard capable of sourcing values from  $100\text{ mOhm}$  to  $100\text{ Mohms}$  on any free scanner channel.

The model 66252 DMM Switch is a unique, field installable option for the model 6625 Resistance Measurement System.

Additional software utilities are available to allow automatic calibration of precision instruments such as the Agilent 3458A DMM and other Long Scale Multi-meter Resistance Ranges.

## 66252 DMM SWITCH

The DMM Switch will work with any resistance standard connected to a 6625 Scanner. The DMM Switch option also includes a Low Thermal short for connection to the scanner. The short allows for nulling out uncontrolled affects such as lead resistance and thermals from the DMM through the scanner. For example, Agilent recommends zeroing out all lead resistance prior to connecting up any resistance standard. To automate this process, simply connect the leads from the DMM to a free channel on the system scanner. Place the Zero Short adaptor on a second free channel. Select both channels and null out the DMM. All lead and thermal affects have now been accounted for.



### Software Compatibility



Available utilities will work with Bridgeworks-C or 6625AF Bridgeworks 2.0 and up versions of software. Optional utilities for calibrators such as the 5700 and 5720's can fully automate calibration of the Resistance function of these calibrators including either 2 wire or four wire outputs and the 1.9X values without having to stop or change leads. There are also software utilities available for long scale DMM's such as the HP 3458A. Again, these utilities can fully automate the calibration of the Resistance function of these DMM's. Guildline can produce other software utilities, which calibrate Resistance Functions for Standards such as Wavetek/Datron, Fluke, Keithley and others. Please contact Guildline for availability and cost.

### Need The Ultimate In A Primary Resistance Standard?

Step up to our 6634A or 6636 Series of Temperature Stabilized Resistance Standards. **From 5 to 10 Values with a Range of 0.1 Ohms to 10 TeraOhms all contained within their own controlled temperature environment.**



When you have had your fill of oil baths, and want the best in a stand-alone Resistance Standard today, take a look at our 6634A and 6636 Temperature Stabilized Resistance Standards. With unsurpassed stabilities, its own built-in temperature environment and temperature coefficients down in the parts per billion (ppb) make them an excellent addition to any Metrology Laboratory.

#### GENERAL SPECIFICATIONS

##### Environmental

Operating Temperature	-20 °C to 60 °C
Operating Humidity	15% to 80% RH non-condensing
Storage Temperature	-20 °C to 60 °C
Storage Humidity	15% to 80% RH

**GUILDLINE IS DISTRIBUTED BY:**

#### ORDERING INFORMATION

66252	DMM Switch (with Low Thermal Short)
/Upgrade	Upgrades Bridgeworks-R to Bridgeworks-C Version
/57XX	Bridgeworks-C 57XX Series Utilities
/3458	Bridgeworks-C HP 3458A Series Utilities
/CUS UTL	User Requested System Utility

##### Optional Standards

6634A-X	Temperature Stabilized Resistance Standard
6634A-TS	Traveling Standard (4 Elements)
6664B	2 Amp, 16 Channel Low Thermal Scanner
6664C	1000 V, 2Amp 8 or 16 Channel Low Thermal Scanner

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