

# 66252 AUTO SWITCH

## UNIQUE SWITCH COMPATIBLE WITH ALL 6625A MEASUREMENT SYSTEMS

Provides Ease of Switching to Use Resistance Standards for Calibrators and DMM's!



**Guildline Instruments Limited** is pleased to introduce the 66252 Auto Switch for all versions of the 6625A Resistance Measurement Systems including the widely fielded 6625AF. The 66252 Auto Switch is a unique, field installable option for Guildline's Resistance Measurement Systems.

**NOW USE YOUR 6625 SYSTEM RESISTANCE STANDARDS FOR BOTH MEASUREMENT AND SOURCE APPLICATIONS WITHOUT HAVING TO DISCONNECT AND RECONNECT WIRES.**

This option allows operators new flexibility when using the 6625A 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 wants to use the Resistance Standards as a source for items such as artifact calibrations, high accuracy DMM's and other metrology calibrations.



### FEATURES

- Allows System Resistance Standard to be used as Resistance Source
- Available in Bench Configurations (No Modification to 6625AF System)
- Usable Resistance Range 1Ω to 100 MΩ
- Input Impedance >10<sup>14</sup>
- 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 Effort.
- Wide Operating Range 18 °C to 28 °C
- Use with any Number of 6664 Series Scanners

To use with the 6625A System 6622 Series Bridge, simply turn and set the Auto Switch to "Bridge" (Measure) and operators have a wide measurement range from 1 uΩ to 100 MΩ. 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 Auto Switch to "DMM" (source) and you now have your resistance standard capable of sourcing values from 100 mΩ to 100 MΩ on any free scanner channel.

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

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 Auto Switch

The Auto Switch will work with any resistance standard connected to a 6625 Scanner. The Auto Switch option also includes a Low Thermal short for connection to the scanner. This 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 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 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 4-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 also provides 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 and EMI shielded environment.



GENERAL SPECIFICATIONS			
Operating Humidity (non-condensing)	15% to 80%RH	Storage Humidity (non-condensing)	< 90%RH
Operating Temperature	23 °C ± 5 °C		73 °F ± 9°F
Storage Temperature	-20 °C to +60 °C		-4 °F to +140°F

ORDERING INFORMATION	
66252	Auto Switch
ZeroLink	Included
/TM	Technical Manual - Included
/3458	Bridgeworks-C HP 3458A Series Utilities
/57XX	Bridgeworks-C 57XX Series Utilities
/Upgrade	Upgrades Bridgeworks-R to Bridgeworks-C Version
/CUSUTL	User Requested System Utility
Other Lead Sets are Available – Contact Guildline for more information	

GUILDLINE IS DISTRIBUTED BY:



Bât. Les Lauriers - L'Orée des Mas  
Avenue du Golf  
34670 Baillargues - France  
Téléphone : +33(0)9 52 08 08 09

[contact@evomesure.com](mailto:contact@evomesure.com)  
[www.EvoMeasure.com](http://www.EvoMeasure.com)

30630-00-85 Rev. B1 Copyright © 2018.03.26 Guildline Instruments Limited. All rights reserved. Subject to change without notice.