

6564 SERIES

8 and 16-Channel, High to Ultra-High Resistance Scanners

Most Advanced High to Ultra-High Resistance Scanner Available Today!



FEATURES

- Thermoelectric Potentials: < 20 nV
- Contact Life: >10,000,000 Cycles
- Withstands up to 1000 Vdc Providing Fully Automated Resistance Measurements
- Measurements from 100 k Ω to 10 P Ω with No Guarding Required
- Fully Automates Transfer or Bridge Measurements
- Very Low Leakage that Can be Easily Characterized
- Front Panel or Remote GPIB Control
- 2 Terminal Switching Matrix, 8 or 16 Channels
- 8 Channel is Upgradeable to 16 Channels
- N-Type Coaxial Terminals

Complete Automated High to Ultra-High Resistance Measurement Systems Available! Check out the 6535 High to Ultra High Resistance Measurement Systems. Guildline's 6564 High to Ultra-High Resistance Scanners are the first commercial scanners capable of operating with measurement capabilities to 10 P Ω 's and at voltages to 1000 Vdc. This capability greatly improves the measurement and calibration throughput of high and ultra-high ohm resistance measurements. Standard laboratories can easily and quickly automate measuring single or multiple resistance values.

The 6564 Series Scanners Provides >100 P Ω Typical Isolation, Measurements to 10 P Ω and with Voltages to 1000 V. True Automation for High to Ultra-High Value Resistance is Now Available for Everyone!

Use of the 6564 Scanners makes no material contribution towards uncertainty based on noise or repeatability. This means using the scanner has no measured effect on Guildline's 6520 Teraohmmeter or 6530 TeraOhm Bridge-Meter Transfer measurement mode throughout the entire operational range.

Contributing less than 1 ppm of Leakage for measurements at 100 G Ω and lower, the 6564 scanner has negligible effect on the uncertainty contribution when used for direct reading measurements. Furthermore, due to the repeatability of the scanner's leakage, this leakage is easily characterized and can be removed by specifying the offset.

High and Ultra-High ohm resistance measurements are typically difficult to make and time consuming because of the low signal/noise ratio. With the 6564 Scanners and software, these difficult high ohm measurements can now be automated and scheduled at any time that is convenient to the user, even at night and weekends when the lab is empty and quiet.

8-channel and 16-channel models are available. Like other Guildline products, the 8-channel scanner can be expanded to a 16-channel model, giving our customers exactly what's needed now, and the flexibility for future growth.

The 6564 Scanners are provided with BNC, Triax and type N connectors used by Guildline Teraohmmeters. Optional adaptors are provided to support BPO, BNC, and other types of connections. The 6564 offers convenient operation from either the front panel or from the built-in IEEE 488 bus; and for best in automation can be used with Guildline's TeraCal™ Software.

6564 Series - 8 and 16 Channel, High to Ultra-High Resistance Scanners

6564 Series Specifications

ISOLATION SPECIFICATIONS		
Measured Resistance Value	Leakage	
100 ΜΩ	<0.1 ppm	
1 GΩ	<0.1 ppm	
10 GΩ	0.1 ppm	
100 GΩ	1 ppm	
1ΤΩ	10 ppm	
10 ΤΩ	100 ppm	
100 ΤΩ	1000 ppm	
1ΡΩ	1%	
10 ΡΩ	10%	

6530-XR Specifications		GUILDLINE STANDARD	
Transfer Mode (24 Hours)	Direct Reading (12 Month)	RESISTOR DRIFT (12 MONTH)	
15 ppm	100 ppm	15 ppm	
15 ppm	150 ppm	35 ppm	
20 ppm	500 ppm	100 ppm	
20 ppm	700 ppm	200 ppm	
70 ppm	1100 ppm	500 ppm	
200 ppm	3000 ppm	750 ppm	
500 ppm	5000 ppm	1000 ppm	
1500 ppm	2.0%	NA	
3500 ppm	25%	NA	

GENERAL SPECIFICATIONS					
Thermoelectric Potentials:	< 20 nV typical and < 50 nV max.				
	Life: >10,000,000 cycles				
Relay Contact Ratings:	Initial Contact Resistance: 0.05 Ω max.		Current: 2 A max at 10 V		
	Voltage Switched: 100 V max. at 1 mA		Voltage Non-Switched: 1000 V max.		
Leakage Resistance:	>100 ΡΩ				
Channel Outputs Termination	Male N Type Termination – Optional Adaptors available upon request				
Communication	IEEE 488 Standard				
Power Supply:	External 5 V DC supply with input power: 95~260 VAC, 50/60 Hz. Consumption: 51.3 VA				
Environmental	Temperature		Humidity		
Operating	18 °C to 28 °C		15% to 80% RH		
Storage	-20 °C to 70 °C		15% to 80% RH		
Dimensions Height		Width	Depth	Weight	
millimetres	143 mm	451 mm	420 mm"	15 kg	
inches	5.6"	17.7"	16.5"	33 lbs	

ORDERING INFORMATION		
6564/16	16-Channel Low Thermal, Quad Scanner, 1000 V _{max}	
6564/8	8-Channel Low Thermal, Quad Scanner 1000 V _{max}	
/TM	Technical Manual (Included)	
/cc	Certificate of Conformance (Included)	
	*Precision Leads Set for Type N Available Upon Request	
	*Optional Adaptors Include BPO	
/CIS	System Controller with IEEE and Software Integrated	
IEEE-PCI	NI IEEE-488.2 Interface for a PCI slot (Win 9X/NT/ME)	
IEEE-2m	NI IEEE-488.2 Interface cable, 2m double shielded	

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