

SR5000GP

Guided Probe Module

For SR5000 Digital Test Subsystem



- DC to 50 MHz Operation
- Dual Threshold Comparators
- 64K Vector Depth
- Enable / Disable Probe Testing Per Vector
- Learns Known Good Responses From UUT
- Active Input Buffer / 100K Ohm Input Impedance
- Expect, Mask, and Record Memories
- Record Vector Count / Time Tag
- 24-Bit Continuous Cycle Counter
- Detect Logic High Input with LED Indicator
- Detect Logic Low Input with LED Indicator
- Programmable Input Threshold
- Overvoltage Protection
- Hardware Signature Generation (Polynomial CRC)
- Edge Sample/Compare or Window Compare Modes
- Programmable Sample Strobe / Window
- Minimum Pulse Width 10 ns
- Static Analog Measure, 12-Bit Resolution, $\pm 10.0V$ Range

The SR5000GP Guided Probe Module (GPM) provides added capability to read test points (nodes) on the UUT to determine pass / fail conditions. The GPM also adds more clocks, triggers, and sync to the SR5000 subsystem. The guided probe is capable of testing and detecting high, low, and indeterminate states. It can also detect pulses and measure analog voltages. Upon determination of the pass / fail state, the guided probe stores the UUT response along with the compare results.

The probe uses an active input to reduce circuit loading and serves to condition the UUT signal before routing it to the guided probe logic in the GPM. An activation switch is located on the probe body to trigger or continue test execution. The SR5000GP Guided Probe Module is supplied as a separate, single-slot, C-size VXI Guided Probe Module.



SR5000GP SPECIFICATIONS*

Frequency Range:	DC to 50 MHz
Minimum Pulse Width:	10 ns
Modes:	Edge sample / compare Window compare
Memory Depth:	65,500 vectors
Input Impedance:	100k ohms
Resolution:	12-bits, standard analog measure, ±10.0 volt range
Memory Types:	Stimulus Output, tristate Response Expect, mask Record
Indicators:	Detect Logic High LED (red) Detect Logic Low LED (green)
Overvoltage Protection:	40.0 volts

VXI Specifications

Interface Compatibility:

Type	Register-based, servant only (controlled by SR5010)
Revision	1.3 and 1.4
Size	C-size, single slot
Configuration	Static
Memory	2 MB VME A32/D32

Power Requirements:

+5.0 volts	5.0 A	25 W
-5.2 volts	2.5 A	13 W
-2.0 volts	1.5 A	3 W
+12.0 volts	0.1 A	1.2 W
-12.0 volts	0.1 A	1.2 W
+24 volts	0.2 A	4.8 W
-24 volts	0.2 A	4.8 W

Total Power		53.0 W

Cooling Requirements:

Per Slot Average	53 W (max.)
Airflow	4.24L/sec @ 0.30 mm water pressure for 10°C temperature rise

Environmental Specifications:

Temperature	Storage = -40°C to +75°C Operating = 0°C to +45°C
Humidity	5% to 95% relative, noncondensing

* Specifications subject to change without notice.