R-1560

I/O Controller Product Brochure

Version 0.3.00
May 2008

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Unit Overview

The **R1560** I/O Controller provides all of the circuitry necessary for the operation of a host computer in an automated signal acquisition and processing system.

The **R-1560** I/O controller incorporates switching for antenna inputs selection during TEMPEST testing and system calibration. A control panel permits manual operation of the impulse generators and selection of the antenna inputs. Two impulse generators are used as a calibration sources, separate low frequency impulse. In Remote Mode, under control of the IEEE-488 interface, the **R-1560** communicates with host computer.

Calibration of the R-1560 is traceable to equipment certified by the N.I.S.T

The model **R1560** I/O controller, consist of several modularly constructed circuit assemblies that are contained within a radio frequency shielded enclosure, and integrated with a front panel section containing the operator controls, and indicators. Input and output connections are provided by dedicated controls located on the rear panel of the instrument. External electronic control of instrument functions is provided by a standard IEEE-488 Interface Connector.

Antenna Port Selector

- 5 chassis isolated ports for low frequency
- 5 ports for high frequency

R-1560 Specifications

Impulse Generators	Two impulse generators 1.One chassis isolated for the low frequency 2. Second for the high frequency
IEEE - 488.2 IF Interface:	Power distribution
Port Selection: Function:	One of six selection, plus "off", controlled from the front panel or via the IEEE - 488 IF(interface)
Inputs:	Six low frequency inputs (DC - 250kHz), of which port 1 is connected internally to the impulse generator Six high frequency inputs (250kHz-1GHz), of which port 1 connected internally to the impulse generator
Outputs:	One low frequency output (DC - 250kHz) "BNC" One high frequency output (250kHz - 1GHz) "N"
Impedance:	50W nominal
Input Connectors: Port	Type N, located on the rear panel: five low frequency inputs, five high frequency inputs, 2 - 6
Losses:	Less than 3dB over specified frequency range
Controls:	front panel pushbutton selects one of five inputs for each of the two selectors in unison; either locking pushbutton or connected receiver selects either high or low frequency selector (button illuminated when low frequency selected); selector that isn't enabled by the pushbutton or receiver makes no connection
Display:	Port #, amplitude and repetition rate on the front panel indicate which one of the five inputs is selected; LED in pushbutton illuminate when low frequency is selected

Response Time:	Connection will be stabilized no more than 40 milliseconds from receipt of selection command over the IEEE - 488 interface
Impulse Generator:	
Function:	High amplitude, low duty cycle impulse generators useful for calibration of the receiver; output amplitude and pulse reception rate controlled from the front panel or via the IEEE - 488 interface
Output Spectral Content:	100Hz to 1GHz
Pulse Repetition Rates:	Single, 10Hz to 1MHz in decade steps with continuous vernier, or AC line triggered, or externally triggered
Frequency Stability:	5 x 10-6 from o to 50°C Maximum
Output Level:	80dBuV/MHz at 50 MHz Output Attenuation Range: 121dB in 1dB steps Output Impedance: 50W nominal
RF Output:	One for use from 100Hz - 250kHz, connected internally to the low frequency port selector.

Printed in the USA, May 7, 2008

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