

AT1600M Series

Multiplexer

Data Sheet



A high performance, cost effective solution for broadband RF switching...the AT1600 series is the fastest switch family in the industry.

Combining Sunrise's AT1600 series multiplexer with the industry proven AT2000/2500 series spectrum analyzers is the ideal solution for remote headend testing and return path monitoring. Together they offer unparalleled test and measurement performance and flexibility.

Full spectrum analysis of signals from 1 MHz to 1 GHz allows you to monitor forward path in addition to the reverse path with a single tool. Both analog and digital services can be tested including 16, 64 and 256 QAM signals.

The 1600 series multiplexer switch offers a high performance, cost effective solution for broadband RF switching in headend environments. These switches are ideal for test measurement systems, such as the realWORX monitoring system, where multiple CATV signals need to be tested through the same spectrum analyzer. The 1600 series is compatible with the AT2500HM series analyzers as well as with previous Sunrise AT2000HM series spectrum analyzers.

With a 100 micro-seconds switching rate, the AT1600 series is the fastest switch family in the industry. Unity gain provides consistent output levels, simplifying test measurements. Its convenient 1 RU rackmount package saves valuable space.

The AT1602M connects two independent analyzers to the CATV network. Units can be daisy-chained to allow RF input configurations of up to 256 inputs x 2 independently controlled RF outputs. Control options include RS-232 and RS-485 interfaces, as well as front panel buttons for manual operation. The AT1601M has the same features but in single output configuration.

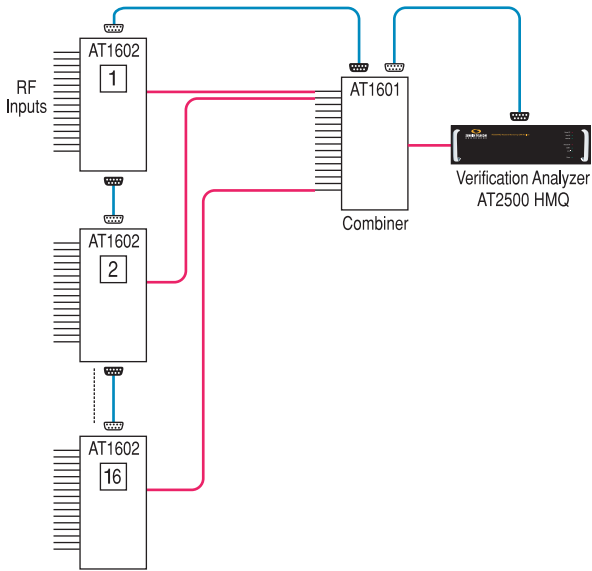
KEY FEATURES

- Full 1 GHz performance RF matrix. 16 × 1 (AT1601M) or 16 × 2 (AT1602M)
- Fastest externally controlled switch to switch rate of only 100 microseconds
- Unity gain through the switch
- Front panel access allows individual manual control of output A or B

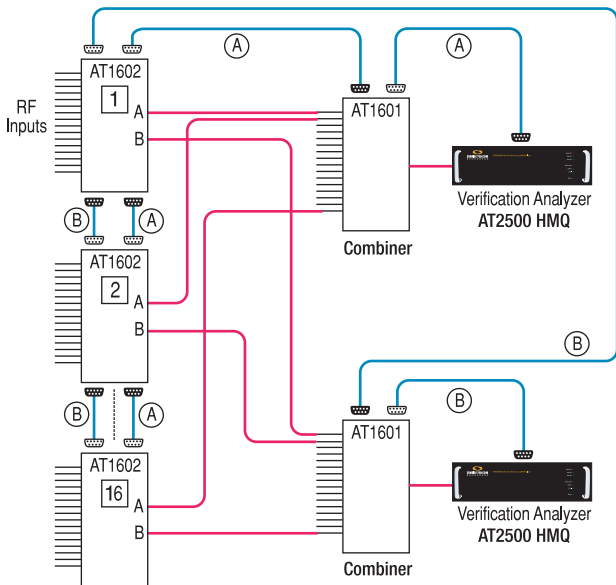
BENEFITS

- Units can be daisy chained to support up to 256 inputs with AT1601M or up to 256 × 2 with AT1602M
- Compatible with Sunrise's AT2000HM/AT2500HM series remote controlled spectrum analyzers and 3010H Signal/sweep analyzers
- Locally control up to 256 switch ports through an analyzer.

APPLICATIONS



256 input ports and 1 output port switches for periodic monitoring of analog, digital or ingress and remote live interactive measurements



256 input ports and 2 output port switches for periodic monitoring of analog, digital or ingress and remote live interactive measurements where monitoring tasks are shared by two analyzers to increase monitoring time of each monitoring mode

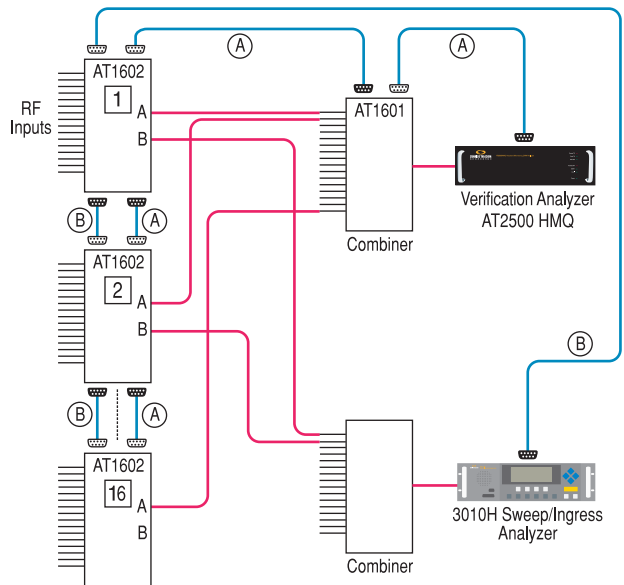
Using AT1601/1602 Switches With AT2000/2500 Spectrum Analyzers

Up to sixteen AT1600 series switches can be co-located with each Sunrise AT2000/2500 series spectrum analyzer, giving the user the ability to locally control up to 256 switch ports through the analyzer. Alternately, utilizing Sunrise Telecom's suite of Windows® PC-Based remote software solutions, WinRemote II and realWORX, the user can remotely control multiple switches (connected to the analyzer) from any remote location via the LAN, modem or the Internet from a PC.

Using AT1601/AT1602 Switches with Sunrise's 3010 Signal/Sweep System

The AT1600 series switch can be connected to the 3010 Signal/Sweep System to perform remote return path ingress and sweep measurements.

The system would be made up of a Sunrise's 3010H Sweep System connected to multiple AT1600 switches at the headend and the 3010R in the field.



AT1600 series switches used with Sunrise's 3010H Sweep/Ingress system for remote return path ingress and sweep measurements



ORDERING INFORMATION

- AT1602M 1 GHz 16x2 Headend Multiplexer
Includes front controls and testpoint, AC power supply and User Manual
- AT1601M 1 GHz 16x1 Headend Multiplexer
Includes front controls and testpoint, AC power supply and User Manual
- AT2500HM 1.5 GHz Headend Rackmount CATV Spectrum Analyzer
AT2500HMQ 1.5 GHz Headend Rackmount QAM/CATV Spectrum Analyzer
- 85963A CaLan 3010H Headend Sweep/Ingress Transmitter
Rackmount headend 1 GHz SLM Analyzer
- 85962A CaLan 3010R Dual Path Sweep/Ingress Analyzer Field portable 1 GHz SLM Analyzer
- A99026010 WinCom II - Data Management Software
A99026021 WinRemote II - Remote Control software for Spectrum Analysis Software, digital QAM measurements (HMQ) and realVIEW (realWORX) functionality.

	AT1601M	AT1602M	
RF Inputs	16	16	Common to both channels
RF Outputs	1	2	Independent outputs and controls for each channel
Test Points	1	2	One for each channel, located on front panel
Comm. Ports	2	4	2 Input ports (1 for each channel) and 2 Output ports (1 for each channel)
Comm. Port Type	RS-232 or RS-485		Factory configured option

PHYSICAL PROPERTIES

Dimensions

Size: 19"W x 1.75"H x 12.5"D

1 RU (Rack Units) High

Weight: 4 kg (9 lb)

Power: 115V, 50/60 Hz, 12 VDC, 500mA

STANDARD ACCESSORIES

User Manual

Battery charger

Serial cable for PC connection



For more information or a directory of sales offices: info@sunrisetelecom.com | www.sunrisetelecom.com