

Coaxial Relay Switch Matrix for 26.5 GHz RF Systems

GEM Microwave ATS-802 Product Summary



Features & Benefits

Key Performance Specifications

- Frequency range DC to 26.5 GHz
- 4 x SP6T (terminated) and 4 x SPDT coaxial relays
- Power rating 100 W CW @ 2 GHz, 30 W @ 26.5 GHz
- Isolation 80 dB (typ) @ 26.5 GHz
- VSWR \leq 1.3 (typ), 1.8 (max) @ 26.5 GHz

Features

- Built-in 5 V / 5.5 V / 4 A power supply for UUT
- External power supply switching (50 V / 10 A max)
- Built-in RF attenuator: 18 GHz, 20 dB, 5 Watt, 18 GHz, 30 dB, 100 Watt (optional)
- Wideband amplifier (optional)
- Digital I/O
- Hardware based trigger. New technologies and radar applications call for considerably faster and often precisely defined path switching intervals. The ATS-802 hardware trigger option delivers precise, reproducible and accelerated path switching. Up to 16 paths can be controlled, depending on the trigger type. A path can consist of just one switching relay or a number of switchable elements. The trigger function can be programmed using SCPI commands. Since calculating trigger intervals for paths containing multiple switching elements is a tedious task, the controller offers a very useful feature. It calculates the minimum trigger interval for a given path based on the data sheet values of all switching elements involved and taking into account the internal delays.
- Analog inputs (multiplexed), and A/D converter
- Control interface: USB
Ethernet (optional)
- Software interface: SCPI

Applications

- ATE test stations for routing test points to test equipment
- Microwave signal switching (DC to 26.5 GHz)
- Instrumentation control and monitoring
- Switching inputs from RF analyzers to UUT's

Product Description

The ATS-802 Switch Matrix is a multipurpose solution for testing RF components, wireless devices and specialized antenna systems. The switch matrix is used for signal routing between instruments and unit(s) under test (UUT), and enables multiple tests to be performed with the same setup removing the need for frequent connections and disconnections.

Custom Design

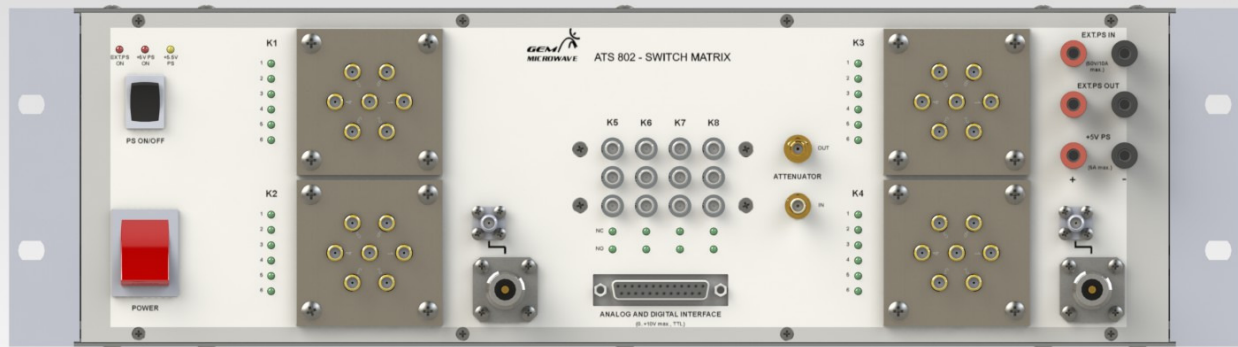
GEM Microwave offers custom integration of the following building blocks

- 1U / 3U / 4U / 6U chassis (other sizes are available)
- LCD/keypad or touch screen local control interface
- Ethernet, RS-232, GPIB, EWEB (web browser) or SNMP remote control interfaces, LabVIEW GUI
- Expandability by cascading specific units using CANbus and with master/slave control capability
- RF coaxial switches (SMA, 3.5mm, 2.92mm and 2.4mm)
- Matrix switches
- Adapter Switches, DC switchboard for amplifiers
- Attenuators, programmable attenuators
- Terminations, couplers, combiners, filters
- Filter banks
- RF Amplifiers
- Power Supplies, A/D converters

Engineering team is dedicated to support customers all the way from product selection, custom solution design to RF system integration and post production support.



Front Panel Drawing



Product Summary

Datasheet and full specifications for ATS-802 are available upon request.

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