

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N1810TL

The Keysight (formerly Agilent/HP) N1810TL is a high-performance terminated, latching Single Pole Double Throw (SPDT) electromechanical coaxial switch. Designed for precision RF and microwave test and measurement applications, it provides exceptional repeatability and a long operating life of at least 5 million cycles. The switch is highly configurable, with frequency options extending from DC up to 67 GHz and multiple coil voltage and logic control options available.

SPECIFICATIONS

General

Interfaces	D-sub 9-pin or solder terminals (option dependent)
------------	--

Physical

Power Supply	5 V, 15 V, or 24 V DC (coil voltage option dependent)
Operating Temperature	-25 °C to +75 °C °C

General Specifications

Switch Type	SPDT (Single Pole Double Throw), Terminated
Frequency Range	DC to 4, 20, 26.5, 40, 50, or 67 GHz (option dependent)
Characteristic Impedance	50 Ω
Operating Life	5,000,000 cycles minimum
Internal Termination Impedance	50 Ω

RF Performance Specifications

Insertion Loss Repeatability	0.03 dB maximum (up to 5 million cycles)
Maximum Continuous RF Power (Termination)	1 W CW

Switching Characteristics

Actuator Type	Latching
Switching Time	15 ms maximum
Contact Timing	Break-before-make

Drive and Control Specifications

Nominal Coil Voltages	5 V, 15 V, or 24 V DC (option dependent)
TTL/CMOS Control	Available (option dependent)
Position Indicators	Available (option dependent)

Environmental and Compliance Specifications

Storage Temperature	-55 °C to +85 °C
---------------------	------------------

Physical and Mechanical Specifications

RF Connectors (Options 004, 020, 026)	SMA female
RF Connectors (Option 040)	2.92 mm female
RF Connectors (Option 050)	2.4 mm female
RF Connectors (Option 067)	1.85 mm female

Options and Configurations

Frequency Range Options	004 (4 GHz), 020 (20 GHz), 026 (26.5 GHz), 040 (40 GHz), 050 (50 GHz), 067 (67 GHz)
Coil Voltage Options	105 (5 VDC), 115 (15 VDC), 124 (24 VDC)
DC Connector Options	201 (D-Sub 9-pin), 202 (Solder Terminals)

TECHNOLOGY

Electromechanical Coaxial Switch

APPLICATIONS

RF & Microwave Test & Measurement

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.