

## Keysight High Performance Electromechanical SPDT Switches

The Keysight Technologies, Inc. high-performance electromechanical coaxial switches provide reliable switching in signal routing, switch matrices and ATE systems.

With 0.03 dB insertion loss repeatability at 40 GHz guaranteed up to 5 million cycles (10 million cycles typical) and exceptional isolation, Keysight high-performance switches provide the performance you need from DC to 67 GHz.

Superior performance with guaranteed specifications to 67 GHz

- Guaranteed performance  
< 0.03 dB insertion loss repeatability at 40 GHz  
guaranteed for 5 million cycles
- Long operating life  
10 million cycles (typical)
- High isolation  
Typically > 70 dB at 67 GHz
- Broad frequency range  
DC to 4, 20, 26.5, 40, 50 and 67 GHz



Keysight N1810TL



Keysight N1810UL

## Product specifications

| Model   | Frequency (GHz) | Termination  | Average power (W) | Peak power (W) | Isolation (dB) | Insertion loss (dB) | SWR | Speed (ms) | Life cycle (million) | Driving voltage (Vdc) | RF connectors                     |
|---------|-----------------|--------------|-------------------|----------------|----------------|---------------------|-----|------------|----------------------|-----------------------|-----------------------------------|
| N1810TL | DC to 67        | Terminated   | 1                 | 50             | 70             | 1.12                | 1.9 | 15         | 5                    | 5, 15, 24             | SMA (f), 2.92 mm, 2.4 mm, 1.85 mm |
| N1810UL | DC to 67        | Unterminated | 1                 | 50             | 70             | 1.12                | 1.9 | 15         | 5                    | 5, 15, 24             | SMA (f), 2.92 mm, 2.4 mm, 1.85 mm |

## High performance SPDT option

| Model               | Option type     | Option           | Option description                     |
|---------------------|-----------------|------------------|--|
| N1810TL/<br>N1810UL | Frequency range | 004              | DC to 4 GHz                            |
|                     |                 | 020              | DC to 20 GHz                           |
|                     |                 | 026              | DC to 26.5 GHz                         |
|                     |                 | 040              | DC to 40 GHz                           |
|                     |                 | 050              | DC to 50 GHz                           |
|                     |                 | 067              | DC to 67 GHz                           |
|                     | Coil voltage    | 105              | 5 Vdc and includes Option 402          |
|                     |                 | 115              | 15 Vdc                                 |
|                     |                 | 124              | 24 Vdc                                 |
|                     | DC connector    | 201              | D-submini 9 pin (f)                    |
|                     |                 | 202              | Solder lugs                            |
|                     | Performance     | 301 <sup>1</sup> | High isolation                         |
|                     |                 | 302 <sup>1</sup> | Low SWR and insertion loss             |
|                     |                 | UK6              | Calibration certificate with test data |
|                     | Drive           | 401              | TTL/5V CMOS compatible                 |
|                     |                 | 402              | Position indicator                     |

1. Not available for option 040, 050 and 067.

For more details on the Keysight EM switches and ordering information see the “Keysight RF and Microwave Switch Selection Guide”, literature number 5989-6031EN.

For more information on Keysight switches, please visit [www.keysight.com/find/switches](http://www.keysight.com/find/switches)

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