VAUNIX LSW-802P4T – Absorptive SP4T RF Switch 100-8000 MHz

Lab Brick® phase-matched SP4T switch · USB / Ethernet control · Product Datasheet

FREQUENCY-DEPENDENT RF PERFORMANCE

Parameter	Min	Typ	Max
Insertion Loss up to 3 GHz	–	2.5 dB	3.5 dB
Insertion Loss up to 6 GHz	–	3.75 dB	4.5 dB
Insertion Loss up to 8 GHz	–	4.5 dB	5.5 dB
Isolation RFC → RFx	80 dB	90 dB	–
Isolation RFx → RFx	80 dB	90 dB	–

TECHNICAL SPECIFICATIONS

- **Configuration**
  SP4T, absorptive (phase-matched)
- **Frequency Range**
  100 – 8000 MHz
- **Impedance**
  50 Ω
- **Insertion Loss Variation**
  0.25 dB
- **Phase Variation**
  +/- 3°
- **Switching Speed**
  50 ns (Trise/fall)
- **P1dB**
  39 dBm
- **Input IP3**
  60 dBm
- **VSWR**
  1.5:1 (RFC/RFx ON, RFx OFF)
- **Max. Input Level**
  27 dBm (hot switching) / 35 dBm (IL state)
- **RF Connectors**
  5x SMA Female
- **Power Supply**
  USB-powered, +5 VDC / 100 mA
- **Control**
  USB HID / 10/100 Ethernet (WebUI)
- **Software**
  GUI, Windows/Linux SDK, LabVIEW driver
- **Dimensions**
  106.7 x 83.1 x 21.8 mm
- **Weight**
  < 230 g
- **Operating Temp.**
  -5 to +55 °C
- **Form Factor**
  Standalone / 1RU / 2RU rack mount

APPLICATIONS

Antenna Switching Selection between four antenna or signal paths within a single 50 Ω system	**Engineering & Production Test** Repeatable, phase-matched switching for test bench and production lines	**Automated Test Equipment (ATE)** USB HID or Ethernet integration into ATE systems without kernel drivers
Remote Measurement Setups WebUI control with selectable static or dynamic IP assignment	**VNA & Multiport Testing** Fast path selection for S-parameter and multiport characterization	**R&D Lab Automation** Scripted switching sequences via Windows/Linux SDK and Python examples