

# Keysight U3020AS26

## Switching Test Set

### DC to 26.5 GHz

Data Sheet



## Description

The Keysight Technologies U3020AS26 is a switch matrix that consists of two single-pole-six-throw (SP6T) switches. It allows switching of multiple signal paths without physically changing the connections. This allows multiple tests to be performed with the same setup, eliminating the need for frequent connects and disconnects. An entire testing process can be automated, increasing the throughput in high-volume production environments.

## Key features and benefits

- Allows switching of multiple signals without physically changing the connections, reduce test time and increase throughput
- Supported by the Keysight Infiniium Series compliance application framework where switch support is enabled
- Guaranteed 5 million cycles operating life (typical 10 million cycles), reduces cost-of-test and ensures reliability of the test system

## Specifications

Specifications refer to the typical performance standards or limits against which the U3020AS26 is tested.

Frequency range	DC to 26.5 GHz		
Insertion loss (dB)	DC to 1 GHz:	< 0.5	
	1 to 6 GHz:	< 1.2	
	6 to 12 GHz:	< 2.0	
	12 to 20 GHz:	< 2.5	
	20 to 26.5 GHz:	< 3.7	
Amplitude tracking (dB), Channel A to B	DC to 1 GHz:	± 0.05	
	1 to 6 GHz:	± 0.10	
	6 to 12 GHz:	± 0.20	
	12 to 20 GHz:	± 0.30	
	20 to 26.5 GHz:	± 0.80	
Phase tracking (Skew) (pS), Channel A to B	DC to 1 GHz:	± 40	
	1 to 6 GHz:	± 5	
	6 to 12 GHz:	± 6	
	12 to 20 GHz:	± 8	
	20 to 26 GHz:	± 20	
	26 to 26.5 GHz:	± 40	
Port match (dB) Output ports A & B	DC to 1 GHz:	> 30	
	1 to 6 GHz:	> 18	
	6 to 12 GHz:	> 10	
	12 to 20 GHz:	> 10	
	20 to 26.5 GHz:	> 7	
Input ports 1 to 6	DC to 1 GHz:	> 30	
	1 to 6 GHz:	> 18	
	6 to 12 GHz:	> 10	
	12 to 20 GHz:	> 10	
	20 to 26.5 GHz:	> 7	
	20 to 26.5 GHz:	> 8	
Input ports 1 to 6 (internal termination)	DC to 1 GHz:	> 32	
	1 to 6 GHz:	> 20	
	6 to 12 GHz:	> 12	
	12 to 20 GHz:	> 11	
Life	5 million cycles (typical 10 million cycles)		
Connector	SMA (female)		
Maximum input RF power	1 W CW		
Power requirements	100 – 240 V ± 10% 50/60 Hz 50 W		
I/O ports	LAN GPIB		
Physical dimensions			
Height	8.9 cm (3.5 in)		
Width	42.5 cm (16.73 in)		
Depth	58 cm (22.83 in)		
Weight	8 kg (17.64 lb)		
Typical cable performance	Option C01/C02	Option C03/C04	
	<i>Return loss (dB)</i>	> 12 at 12 GHz	> 12 at 12 GHz
	<i>Insertion loss (dB)</i>	< 2.6 at 12 GHz	< 1.2 at 12 GHz
	<i>Skew (ps)</i>	< 2.5 ps at 12 GHz	< 2.5 ps at 12 GHz

## Ordering information

U3020AS26 Switching Test Set	
U3020AS26-C01	SMP (male) to SMA (male) cable, 1 meter
U3020AS26-C02	SMP (female) to SMA (male) cable, 1 meter
U3020AS26-C03	SMP (male) to SMA (male) cable, 16 inches
U3020AS26-C04	SMP (female) to SMA (male) cable, 16 inches

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