

KEYSIGHT TECHNOLOGIES (AGILENT HP)

86062C

The Keysight Agilent 86062C is a full-width 1xN lightwave switch designed for automated production and evaluation testing of large-scale optical devices. Supporting configuration ranges from 20 to 100 output channels, it accommodates 9/125 μm single-mode as well as 50/125 μm and 62.5/125 μm multi-mode fiber types. Built around a temperature-stabilized stepper motor, it offers bidirectional switching, a minimum mechanical life of 10 million cycles, and a visual front-panel signal path display. Remote control is facilitated via GPIB and RS-232 using standard SCPI-compatible commands.

SPECIFICATIONS

General

Interfaces	GPIB, RS-232
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Physical

Power Supply	100 / 120 / 220 / 240 V AC ($\pm 10\%$), 48 to 66 Hz, 45 VA max
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	425 mm × 89 mm × 520 mm mm
Weight	8 kg
Rack Height	2U

Optical Specifications

Wavelength Range (Single-mode)	1280 nm to 1650 nm
Wavelength Range (Multi-mode)	750 nm to 1350 nm
Return Loss (Single-mode)	≥ 55 dB (excluding connectors)
Crosstalk (Single-mode)	< -80 dB

Switching Characteristics

Switching Directionality	Bi-directional
Switch Configuration	1xN (where N is 20 to 100)
Channel Capacity	20 to 100 output channels
Switching Lifetime	10,000,000 cycles minimum
Switching Technology	Precision stepper motor

Optical Fiber and Connector Options

Optical Fiber Compatibility	9/125 μm single-mode, 50/125 μm multi-mode, 62.5/125 μm multi-mode
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Control and Interfaces

GPIB Interface	Standard
RS-232 Interface	Standard
Command Set	SCPI-compatible
Manual Interface	Front panel manual interface with keypad keys

Physical Characteristics

Form Factor	Full-width instrument
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Environmental

Storage Temperature	-40 to +75 °C
Operating Humidity	Up to 95% RH at 40 °C (non-condensing)
Operating Altitude	Up to 4,600 m (15,000 ft)

Optical Performance

Maximum Optical Input Power	+24 dBm
Insertion Loss (Single-mode)	< 1.0 dB (0.6 dB typical)
Insertion Loss (Multimode)	< 1.0 dB (50/125 μm), < 1.5 dB (62.5/125 μm)
Polarization Dependent Loss (PDL)	< 0.05 dB (single-mode)
Return Loss (Multimode)	> 20 dB
Crosstalk (Multimode)	< -60 dB
Switching Time	< 250 ms

Power

AC Input Voltage	100 / 120 / 220 / 240 V AC (±10%)
AC Input Frequency	48 to 66 Hz
Power Consumption	45 VA max

TECHNOLOGY

Fiberoptic Switch

APPLICATIONS

Automated optical production and evaluation testing

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