

# LUMILOOP

LASER-POWERED SENSOR SYSTEMS



Datasheet

LSMux 1.0

**DC - 6(11)GHz  
RF Multiplexer  
12:2 and 36:4**

The LSMux 1.0 RF Multiplexers are relay-based signal switches available as 12:2 and 36:4 models, supporting the switching of 12 or 36 RF inputs to two or four RF outputs. The multiplexers are qualified up to 6 GHz with higher frequency options available upon request.

LSMux 1.0 incorporates a fully functional and freely accessible PC, a 7-inch display, USB 2.0 host ports, a LAN interface and an USB device serial port. Switch states are displayed by and can be set via the touch display. LSMux 1.0 can be operated using standard SCPI commands via LAN or USB.

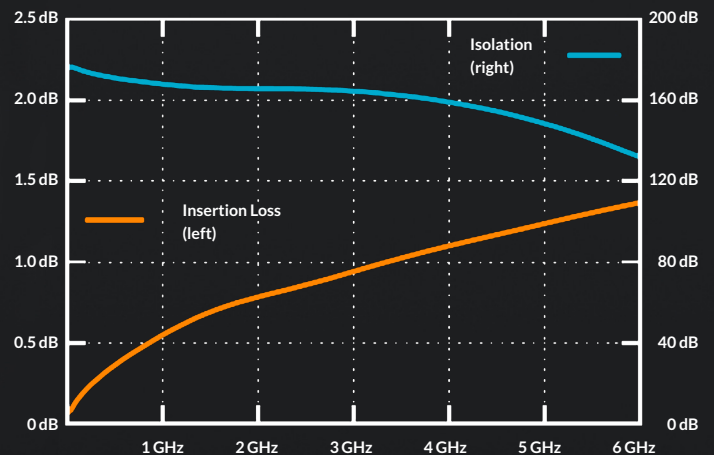
The 12:2 model allows interconnecting an arbitrary RF input to any RF output at the same time. The 36:4 model groups the RF inputs in the form of six blocks with six inputs. Only one RF input of each group can be connected to one of the four RF outputs at one time.

Customized switch models are available upon request.



## Specifications

<b>RF Characteristics</b>	
Frequency Range	DC to 6 GHz, ext. to $\geq 18$ GHz
Insertion Loss	typ. 2 dB @ 6 GHz
Isolation	typ. $>100$ dB @ 6 GHz
Impedance	50 Ohm
<b>RF Inputs</b>	
Count	12 / 36
Maximum Power	10 W / 100 W
Connectors	N female
Return Loss	$>10$ dB
<b>RF Outputs</b>	
Count	2 / 4
Connectors	N female
<b>Switching Cycles</b>	
	$>10$ Million / $>2.5$ Million
<b>Interfaces</b>	
LAN	1 x RJ45
USB Device	1 x USB A
USB Host	12 x USB B
<b>Power Supply</b>	
	100 V to 240 V
<b>Built-in PC</b>	
CPU	2.3 GHz Celeron
RAM / SSD	4 GB / 128 GB
Operating System	Debian GNU / Linux pre-installed
<b>Dimensions</b>	
Form Factor	19 Inch
Rack Units	3 / 6
W x D x H	(480 x 550 x 133/266) mm
<b>Weight</b>	
	10.5 / 16.8 kg
<b>Operating Temperature</b>	
	0 °C to 40 °C



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