# CRS317-1G-16S+RM

The new Cloud Router Switch 317-1G-16S+RM is a rack-mountable manageable switch with Layer3 features, it has 16 SFP+ ports for high performance 10GbE connectivity and a 1GbE copper port for management.

CRS317-1G-16S+RM is powered by a next generation switching chip, giving you wire speed performance for all sixteen 10GbE ports with any Ethernet frame size. New features such as hardware-based Spanning Tree Protocol (MSTP) and Link Aggregation (LACP) provide enhanced protection and true professional performance for your demanding network.

The unit has dual redundant power supplies and passive cooling case, so it's completely silent - for hot environments, like outdoor communications boxes, two redundant fans will automatically keep the system cool if needed.
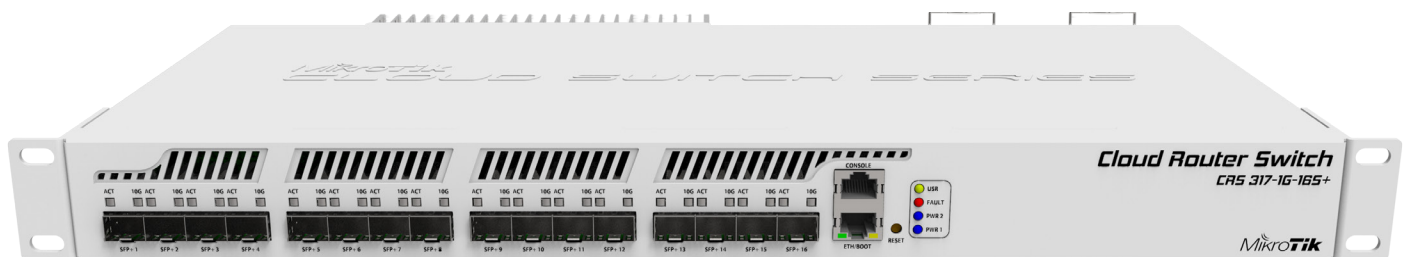
- Boot option for SwOS or RouterOS
- Non-blocking Layer 2 switching capacity
- 16K host table
- IEEE 802.1Q VLAN
- Supports up to 4K simultaneous VLANs
- Port isolation and Port security
- MSTP
- HW MPLS forwarding coming in future software update
- SFP 1.25 and SFP+ 10Gbit module support
- 800 MHz dual core CPU
- Dual power supplies

- Broadcast storm control
- Port mirroring of ingress/egress traffic
- Rapid Spanning Tree Protocol (RSTP)
- Link Aggregation (LACP)
- Access Control List
- MikroTik neighbour discovery
- SNMP v2/v3
- Rackmount and tabletop
- Supports -20 to +60 C ambient temperatures
- Passive cooling with automatic fan for high temperatures

"Dual boot" feature allows you to choose which operating system you prefer to use, RouterOS or SwOS. If you prefer to have a simplified switch only OS with more switch specific features, use SwOS. If you are used to Winbox and would like the ability to use routing and other Layer 3 features on some ports in your CRS, boot and use RouterOS. You can select the desired operating system from RouterOS, from SwOS or from the RouterBOOT loader settings.

It gives you all the basic functionality for a managed switch, plus more: allows to manage port-to-port forwarding, apply MAC filter, configure VLANs, mirror traffic, apply bandwidth limitation and even adjust some MAC and IP header fields. SFP+ cages supports both 1.25 Gb SFP and 10 Gb SFP+ modules.
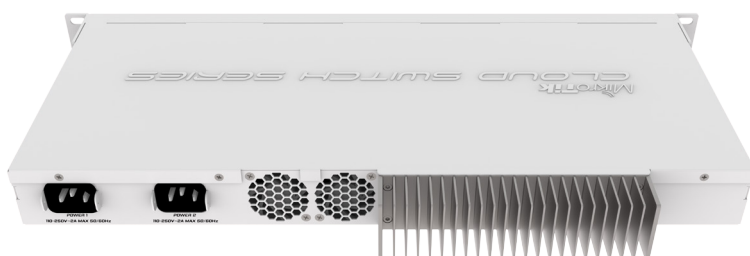
2x IEC cord   Rackmount ears

Specifications

Product code	CRS317-1G-16S+RM
CPU	98DX8216B0 800 MHz
CPU cores	2
Size of RAM	1 GB
Storage type	Flash
Storage size	16 MB
SFP+	16 (supports both 1.25 Gb SFP and 10 Gb SFP+ modules; modules are not included), DDMI support
Dimensions	443 x 224 x 44 mm
License level	6
Operating System	RouterOS or SwitchOS
Number of AC inputs	2
AC input range	110 - 240 V
Redundant supply	Yes
Max Power consumption	42 W
Active case cooling	Yes
CPU temperature monitor	Yes
Operating temperature	-40 to 70° C
LEDs	38
Serial port	RJ45
Suggested price	$399

Ethernet test results

CRS317-1G-16S+RM		98DX8216B0 all port test					
Mode	Configuration	1518 byte		512 byte		64 byte	
		kpps	Mbps	kpps	Mbps	kpps	Mbps
Bridging	none (fast path)	268.3	3258.2	361.2	1479.5	355.2	181.9
Bridging	25 bridge filter rules	98.4	1195.0	98.6	403.9	98	50.2
Routing	none (fast path)	254.4	3089.4	309.8	1268.9	315.4	161.5
Routing	25 simple queues	104.6	1270.3	104.4	427.6	104.6	53.6
Routing	25 ip filter rules	104.6	1270.3	103.4	423.5	103.9	53.2

Switching results

CRS317-1G-16S+RM							
Mode	Configuration	64 byte		512 byte		1518 byte	
		kpps	Mbps	kpps	Mbps	kpps	Mbps
Switching	Non blocking Layer 2 throughput	239,583.3	122,666.7	37,828.9	154,947.4	13,085.2	158,906.4
Switching	Non blocking Layer 2 capacity	239,583.3	245,333.3	37,828.9	309,894.7	13,085.2	317,812.7
Switching	Non blocking Layer 1 throughput	239,583.3	161,000.0	37,828.9	161,000.0	13,085.2	161,000.0
Switching	Non blocking Layer 1 capacity	239,583.3	322,000.0	37,828.9	322,000.0	13,085.2	322,000.0