

MikroTik SFP module compatibility table

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MikroTik SFP/SFP+/QSFP+ compatibility



Note: MikroTik devices and SFP/SFP+/QSFP+ modules do not have any restrictions for other vendor equipment.
As long as the other vendor modules and devices comply with transceiver multi-source agreement (MSA) they should be compatible with MikroTik.

1G SFP

Model	S-RJ01 (https://mikrotik.com/product/S-RJ01)	S-85DLC05D (https://mikrotik.com/product/S-85DLC05D-180)	S-31DLC20D (https://mikrotik.com/product/S-31DLC20D)
CCR1072-1G-8S+	+	+	
CCR1036-12G-4S	+	+	
CCR1036-8G-2S+	+	+	
CCR1016-12S-1S+	+ 1	+ 1	
CCR1009-7G-1C	+	+	
CCR1009-8G-1S-1S+	+	+	
CCR1009-7G-1C-1S+	+	+	
CCR2004-1G-12S+2XS	+	+	
CRS125-24G-1S	+	+	
CRS305-1G-4S+	+	+	
CRS309-1G-8S+	+	+	
CRS312-4C+8XG	-	+	
CRS318-1Fi-15Fr-2S	+	+	
CRS318-16P-2S+	+	+	
CRS326-24S+2Q+	+	+	
CRS354-48G/P-4S+2Q+	+	+	
CSS/CRS326-24G-2S+	+	+	
CRS317-1G-16S+	+	+	
CRS328-4C-20S-4S+	+	+	
CRS328-24P-4S+	+	+	
CRS226-24G-2S+	-	+ 2	
CRS212-1G-10S-1S+	+ 1	+ 1	
CRS210-8G-2S+	-	+ 2	
CRS112-8G/P-4S	+	+	
CRS109-8G-1S	+	+	
CRS106-1C-5S/FiberBox	+	+	
RB4011	+	+	
RB3011	+	+	
RB2011	+	+	
RB260	+	+	
RB922/921	+	+	
RB953GS	+	+	
hAP AC	+	+	
hEX PoE/PowerBox Pro	+	+	
hEX S	+	+	
RBFTC11	+	+	
LHG XL 52 ac	-	+	
RBD22/D23			
mANTBox 52 15s/NetMetal ac ²	-	+	

CSS610-8G-2S+	+	+	
CSS610-1Gi-7R-2S+	+	+	

10G SFP+

Model	S+RJ10 (https://mikrotik.com/product/s_rj10)	S+85DLC03D (https://mikrotik.com/product/Splus85DLC03D)	S+31DLC10D (https://mikrotik.com/product/S31DLC10D)
CCR1072-1G-8S+	+	+	
CCR1036-12G-4S	-	+	
CCR1036-8G-2S+	+	+	
CCR1016-12S-1S+	+	+	
CCR1009-7G-1C	-	+	
CCR1009-8G-1S-1S+	+	+	
CCR1009-7G-1C-1S+	+	+	
CCR2004-1G-12S+2XS	+	+	
CRS125-24G-1S	-	+	
CRS305-1G-4S+	+ 8	+	
CRS309-1G-8S+	+ 5	+	
CRS312-4C+8XG	+	+	
CRS318-1Fi-15Fr-2S	-	+	
CRS318-16P-2S+	+	+	
CRS326-24S+2Q+	+ 7	+	
CRS354-48G/P-4S+2Q+	+	+	
CSS/CRS326-24G-2S+	+	+	
CRS317-1G-16S+	+ 3	+	
CRS328-4C-20S-4S+	+	+	
CRS328-24P-4S+	+	+	
CRS226-24G-2S+	+	+	
CRS212-1G-10S-1S+	+	+	
CRS210-8G-2S+	+	+	
CRS112-8G/P-4S	-	+	
CRS109-8G-1S	-	+	
CRS106-1C-5S/FiberBox	-	+	
RB4011	+	+	
RB3011	-	+	
RB2011	-	+	
RB260	-	+	
RB922/921	-	+	
RB953GS	-	+	
hAP AC	-	+	
hEX PoE/PowerBox Pro	-	+	
hEX S	-	+	
RBFTC11	-	+ 9	
LHG XL 52 ac	-	+	
RBD22/D23			
mANTBox 52 15s/NetMetal ac²	-	+	

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CSS610-8G-2S+	+	+	
CSS610-1Gi-7R-2S+	+	+	

40G QSFP+

Model	QSFP+ Q+DA0001 (https://mikrotik.com/product/q_da0001)	Q+85MP01D (https://mikrotik.com/product/q_85mp01d)	Q+BC0003-S+ (https://mikrotik.com/product/q_bc0003-s)
CRS326-24S+2Q+	+	+	
CRS354-48G/P-4S+2Q+	+	+	

Legend
Color codes: Not supported Check notes below

- NOTES:
1. CCR1016-12S-1S+ / CRS212-1G-10S-1S+ -- SFP+1 interface does not work on any other link speed than 10G (does not support 1.25G fiber optic transceivers)
 2. CRS226 / CRS210 -- Only SFP+1 interface supports SFP 1.25G fiber optic transceivers, SFP+2 works only with 10G transceivers/links.
 3. CSS/CRS317-1G-16S+ -- power controller supports up to 10 simultaneous S+RJ10 modules.
 4. RB4011 -- Only active Direct Attach Cables (MikroTik S+AO0005) are supported. Passive DAC (MikroTik S+DA0001/S+DA0003) are not supported.
 5. CSS/CRS309-1G-8S+ -- 8x S+RJ10 are supported if PoE-in Voltage >30V. Up 4x S+RJ10 are supported when PoE-in Voltage = 24V.
 6. Q+BC0003-S+ -- SFP+ connector support in the SFP+/SFP28 cages
 7. CSS/CRS326-24S+2Q+ -- supports up to 12 simultaneous S+RJ10 modules.
 8. CSS/CRS305-1G-4S+ -- supports up to 2 simultaneous S+RJ10 modules.
 9. RBFTC11 -- works connected to other device 1G SFP port.

S-RJ01

Table that states in what link rates if mounted in specific MikroTik devices S-RJ01 module will be able to work. Use these modules only with auto-negotiation enabled, forced link speeds are not supported. They will negotiate to correct duplex and highest possible rate.

Model	1000	100	10
RB4011	+	+	+
RB3011	+	+	+
RB922	+	+	+
RB921	+	+	+
hAP ac	+	+	+
hEX PoE	+	+	+
hEX S	+	-	-
RB953	+/+	+/-	+/-
RB2011	+	-	-
RB260	+	-	-
RBFTC11	+	-	-
LHG XL 52 ac	-	-	-
RBD22/D23			
mANTBox 52 15s/NetMetal ac²	-	-	-
CRS106	+	+	+
CRS112	+	+	+
CRS125/CRS109	+	+	+
CRS212	+	+	+
CRS226/CRS210	-	-	-
CSS/CRS305-1G-4S+	+	+	+
CSS/CRS309-1G-8S+	+	+	+
CRS318-1Fi-15Fr-2S	+	+	+
CRS318-16P-2S+	+	+	+
CSS/CRS326-24G-2S+	+	+	+
CRS354	+	+	+
CSS/CRS328-4C-20S-4S+	+	+	+
CSS/CRS328-24P-4S+	+	+	+
CSS/CRS317-1G-16S+	+	+	+
CRS326-24S+2Q+	+	+	+
CSS610-8G-2S+	+	+	+
CSS610-1Gi-7R-2S+	+	+	+
CCR1009	+/+	+/+	+/+
CCR1016-12S-1S+	+	+	+
CCR1036-12G-4S	+	+	+
CCR1036-8G-2S+	+	+	+
CCR1072-1G-8S+	+	+	+

Notes:

- Rate works fine: +
- Rate does not work: -
- RB953: SFP2/SFP1
- CCR1009: SFP+/SFP

10 Gigabit Ethernet

S+RJ10

Use these modules only in 10G SFP+ ports with auto-negotiation enabled, forced link speeds are not supported. They will negotiate to correct duplex and highest possible rate. For proper S+RJ10 module installation and recommended use case scenarios, please read S+RJ10 General Guidance (https://wiki.mikrotik.com/wiki/S%2BRJ10_general_guidance).

Speed	Cable type	S+RJ10 to Ethernet port
10BASE-T	Cat5e/6	100m
100BASE-T	Cat5e/6	100m
1000BASE-T	Cat5e/6	100m
2.5GBASE-T	Cat5e/6 UTP	100m
2.5GBASE-T	Cat5e/6 STP	100m
5GBASE-T	Cat5e/6	100m
10GBASE-T	Cat6/7	30m



Note: Negotiated speed highly depends on quality and length of the cables that are used.



Note: S+RJ10 to S+RJ10 always will negotiate to highest possible rate.

The new revision of S+RJ10 now supports jumbo frames up to 10218 bytes at link speed 2.5Gbps, 5Gbps and 10Gbps.

Link Speed	Max MTU
10Gbps	10218
5Gbps	10218
2.5Gbps	10218
1000Mbps	1504
100Mbps	1504
10Mbps	1504

CRS312-4C+8XG

10GE ports maximum supported cable length.

Speed	Cable type	10 Gigabit Ethernet ports
10BASE-T	Cat5e/6	100m
100BASE-T	Cat5e/6	100m
1000BASE-T	Cat5e/6	100m
2.5GBASE-T	Cat5e/6	100m
5GBASE-T	Cat5e/6	100m
10GBASE-T	Cat6/7	30m



Note: Negotiated speed highly depends on quality and length of the cables that are used.



Warning: 10GE ports doesn't support Half duplex mode with forced link speeds.

SFP+ interface compatibility settings with SFP optical transceivers

For MikroTik devices with SFP+ interface that support both 10G and 1G link rate following settings are needed to be set on both linked devices for required interfaces. These settings only relate when optical SFP transceivers are used. In order to get them working in 1G link rate, use the following configuration:

- auto-negotiation disabled
- port speed 1G
- Full-Duplex

Devices which SFP+ ports support 1G links:

- CCR2004-1G-12S+2XS - All SFP+ interfaces can be used in 1G mode if required.
- CCR1072-1G-8S+ - All SFP+ interfaces can be used in 1G mode if required.
- CCR1036-8G-2S+ - All SFP+ interfaces can be used in 1G mode if required.
- CCR1009-8G-1S-1S+ - All SFP+ interfaces can be used in 1G mode if required.
- CCR1009-7G-1C-1S+ - All SFP+ interfaces can be used in 1G mode if required.
- CSS326-24G-2S+RM - All SFP+ interfaces can be used in 1G mode if required.
- CRS3xx series switches - All SFP+ interfaces can be used in 1G mode if required.
- RB4011 series - SFP+1 interface can be used in 1G mode if required.
- CRS226-24G-2S+ - Only SFP+1 supports 1G link speed, SFP+2 is for 10G links only.
- CRS210-8G-2S+ - Only SFP+1 supports 1G link speed, SFP+2 is for 10G links only.
- CSS610 series switches - All SFP+ interfaces can be used in 1G mode if required.

Devices which SFP+ interfaces can be used only for 10G links:

- CCR1016-12S-1S+
- CRS212-1G-10S-1S+

SFP interface compatibility with 100M fiber links

SFP interface on below mentioned devices is compatible with fast ethernet fiber (https://en.wikipedia.org/wiki/Fast_Ethernet#Fiber_optics) links.

Compatible devices (interface):

- CCR1009-7G-1C (combo1)
- CCR1009-7G-1C-1S+ (combo1)
- CRS106-1C-5S (combo1)

- CRS328-4C-20S-4S+ (combo1 - combo4 and SFP1 - SFP20)
- LHG XL 52 ac
- RBD22/D23/mANTBox 52 15s/NetMetal ac²

QSFP+ interfaces compatibility settings with SFP+ ports

For MikroTik devices, the connection between the QSFP+ and SFP+ ports, using breakout cables, the following settings on QSFP+ interfaces need to be set:

- auto-negotiation disabled
- port speed 10G
- Full-Duplex



Note: On the SFP+ side, auto-negotiation remains enabled.

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