

NextLevel Internet Equipment Matrix Sheet

Drafted by NextLevel Internet Engineering Team

Version 3.0

Updated: 12/05/2024

Device Model	Dimension in W x D x H
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Routers	
MikroTik 4011	9 x 4.75 x 1.2 in
MikroTik CCR2004	17.5 x 8.9 x 1.75 in
MikroTik CCR2116-12G-4S+	17.5 x 7.83 x 1.75

Switches	
Cisco 3750 & 3750X	17.5 x 14.9 x 1.75 in
TP-Link 8-port	6.25 x 4.0 x 1.0 in
TP-Link 5-port	3.9 x 3.9 x 1.0 in

Single Circuit Customer Configuration

Note: See box at the bottom of the page for SFP+ info for circuits ≥ 2 Gbps

Carrier	Phone	Medium	Speeds	Router	SFP	Switch	Adtran
1	0	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	n/a	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	2 X S-RJ01	n/a	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	n/a	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	n/a	n/a
	1-4 non-tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	1 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	2 X S-RJ01	1 X TP-Link TL-SG1005P	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X TP-Link TL-SG1005P	n/a
	1-4 tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	1 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	2 X S-RJ01	1 X TP-Link TL-SG108PE	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X TP-Link TL-SG108PE	n/a
	≤ 8 non-tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	2 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	2 X S-RJ01	2 X TP-Link TL-SG1005P	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	2 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	2 X TP-Link TL-SG1005P	n/a
	≤ 8 tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	2 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	2 X S-RJ01	2 X TP-Link TL-SG108PE	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	2 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	2 X TP-Link TL-SG108PE	n/a

≥ 5 Gbps

≥ 5 Gbps MikroTik CCR-2116-12G-4S+ 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) or S+RJ10 (Copper)

Single Circuit Customer Configuration Cont.

Note: See box at the bottom of the page for SFP+ info for circuits ≥ 2 Gbps

Carrier	Phone	Medium	Speeds		Router	SFP	Switch	Adtran
1	>8 tethered	Copper	≤ 100Mbps		MikroTik RB4011iGS+RM	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps		MikroTik CCR-2004-1G-12S+2XS	2 X S-RJ01	1 X Cisco Catalyst 3750X-48P-S	n/a
		Fiber	≤ 100Mbps		MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps		MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X Cisco Catalyst 3750X-48P-S	n/a
	>8 non-tethered	Copper	≤ 100Mbps		MikroTik RB4011iGS+RM	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps		MikroTik CCR-2004-1G-12S+2XS	2 X S-RJ01	1 X Cisco Catalyst 3750X-48P-S	n/a
		Fiber	≤ 100Mbps		MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps		MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X Cisco Catalyst 3750X-48P-S	n/a
	SIP	Copper	< 1 Gbps		MikroTik RB4011iGS+RM	n/a	n/a	1 X Adtran Gen 2 4242908L1
			≥ 1 Gbps		MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	n/a	1 X Adtran Gen 2 4242908L1
		Fiber	< 1 Gbps		MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	n/a	1 X Adtran Gen 2 4242908L1
			≥ 1 Gbps		MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	n/a	1 X Adtran Gen 2 4242908L1
≥ 5Gbps			≥ 5 Gbps MikroTik CCR-2116-12G-4S+ 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) or S+RJ10 (Copper)					

Dual Circuit Customer Configurations

Note: In a Dual Circuit Customer Configuration, ensure all SFP's are selected. You may need more than one to accommodate the hand-off.

Note: MikroTik RB4011iGS+RM can only support a single Fiber connection. If a dual fiber setup is required, must use MikroTik CCR-2004-1G-12S+2XS

Note: See box at the bottom of the page for SFP+ info for circuits ≥ 2 Gbps

Carrier	Phone	Medium	Speeds	Router	SFP	Switch	Adtran
2	0	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	n/a	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	n/a	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	n/a	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	n/a	n/a
	1-4 non-tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	1 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	1 X TP-Link TL-SG1005P	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X TP-Link TL-SG1005P	n/a
	1-4 tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	1 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	1 X TP-Link TL-SG108PE	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X TP-Link TL-SG108PE	n/a
	≤ 8 non-tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	2 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	2 X TP-Link TL-SG1005P	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	2 X TP-Link TL-SG1005P	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	2 X TP-Link TL-SG1005P	n/a
	≤ 8 tethered	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	2 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	2 X TP-Link TL-SG108PE	n/a
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	2 X TP-Link TL-SG108PE	n/a
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	2 X TP-Link TL-SG108PE	n/a

Dual Circuit Customer Configurations Cont.

Note: In a Dual Circuit Customer Configuration, ensure all SFP's are selected. You may need more than one to accommodate the hand-off.

Note: MikroTik RB4011iGS+RM can only support a single Fiber connection. If a dual fiber setup is required, must use MikroTik CCR-2004-1G-12S+2XS.

Note: See box at the bottom of the page for SFP+ info for circuits ≥ 2 Gbps

Carrier	Phone	Medium	Speeds	Router	SFP	Switch	Adtran
2	>8 tethered	Copper	≤ 100 Mbps	MikroTik RB4011iGS+RM	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	1 X Cisco Catalyst 3750X-48P-S	n/a
		Fiber	≤ 100 Mbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X Cisco Catalyst 3750X-48P-S	n/a
	>8 non-tethered	Copper	≤ 100 Mbps	MikroTik RB4011iGS+RM	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	3 X S-RJ01	1 X Cisco Catalyst 3750X-48P-S	n/a
		Fiber	≤ 100 Mbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	1 X Cisco Catalyst 3750X-48P-S	n/a
	SIP	Copper	< 1 Gbps	MikroTik RB4011iGS+RM	n/a	n/a	1 X Adtran Gen 2 4242908L1
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	4 X S-RJ01	n/a	1 X Adtran Gen 2 4242908L1
		Fiber	< 1 Gbps	MikroTik RB4011iGS+RM	1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM)	n/a	1 X Adtran Gen 2 4242908L1
			≥ 1 Gbps	MikroTik CCR-2004-1G-12S+2XS	{1G} 1 X S-31DLC20D (SM) or 1 X S-85DLC05D (MM), and 2 x S-RJ01 / {2G-4G} 1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) and S+RJ10 (Copper)	n/a	1 X Adtran Gen 2 4242908L1

≥ 5 Gbps

≥ 5 Gbps	MikroTik CCR-2116-12G-4S+	1 X S+C61DLC10D (SM) or 1 X S+85DLC03D (MM) or S+RJ10 (Copper)
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Voice Only Customer Configurations

Note: These are builds for sites that do not require our internet services.

Carrier	Phone	Medium	Speeds	Router	SFP	Switch	Adtran
0	0	Copper	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	n/a	n/a
		Fiber	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	n/a	n/a
	1-4 non-tethered	Copper	n/a	n/a	n/a	1 X TP-Link TL-SG1005P	n/a
			n/a	n/a	n/a	1 X TP-Link TL-SG1005P	n/a
		Fiber	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	1 X TP-Link TL-SG1005P	n/a
	1-4 tethered	Copper	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	1 X TP-Link TL-SG108PE	n/a
		Fiber	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	1 X TP-Link TL-SG108PE	n/a
	≤8 non-tethered	Copper	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	2 X TP-Link TL-SG1005P	n/a
		Fiber	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	2 X TP-Link TL-SG1005P	n/a
	≤8 tethered	Copper	n/a	n/a	n/a	2 X TP-Link TL-SG108PE	n/a
			n/a	n/a	n/a	2 X TP-Link TL-SG108PE	n/a
		Fiber	n/a	n/a	n/a	n/a	n/a
			n/a	n/a	n/a	2 X TP-Link TL-SG108PE	n/a

Voice Only Customer Configurations Cont.

Note: These are builds for sites that do not require our internet services.

Carrier	Phone	Medium	Speeds	Router	SFP	Switch	Adtran
0	>8 tethered	Copper	≤ 100Mbps	n/a	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	n/a	n/a	1 X Cisco Catalyst 3750X-48P-S	n/a
		Fiber	≤ 100Mbps	n/a	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	n/a	n/a	1 X Cisco Catalyst 3750X-48P-S	n/a
	>8 non-tethered	Copper	≤ 100Mbps	n/a	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	n/a	n/a	1 X Cisco Catalyst 3750X-48P-S	n/a
		Fiber	≤ 100Mbps	n/a	n/a	1 X Cisco Catalyst 3750-48P-S	n/a
			> 100 Mbps - 1 Gbps	n/a	n/a	1 X Cisco Catalyst 3750X-48P-S	n/a
	SIP	Copper	n/a	n/a	n/a	n/a	1 X Adtran Gen 2 4242908L1
			n/a	n/a	n/a	n/a	1 X Adtran Gen 2 4242908L1
		Fiber	n/a	n/a	n/a	n/a	1 X Adtran Gen 2 4242908L1
			n/a	n/a	n/a	n/a	1 X Adtran Gen 2 4242908L1

Change Log

Version	Date	Notes
V1.1.0	9/17/2021	Consolidated all speeds under 1 Gbps and updated the router. Consolidated all Speeds 1 Gbps and above and updated the router.
V1.1.1	9/21/2021	Removed switches from SIP and Hardware Module Column. Added SFP for Client Hand-off
V2.0.1	11/18/2021	Added two pages to cover voice only clients.
V2.0.2	9/2/2022	Added SFP info for circuits \geq 2Gbps
V2.0.3	9/25/2023	Updated switch descriptions to match circuit sizes
V2.0.4	2/26/2024	Added device dimensions
V3.0	12/5/2024	Added new router availability for CCR 2116-12G-4S+