



Cisco RF Cables, Adapters, Lightning Arrestors, Extension Bases and other Accessories

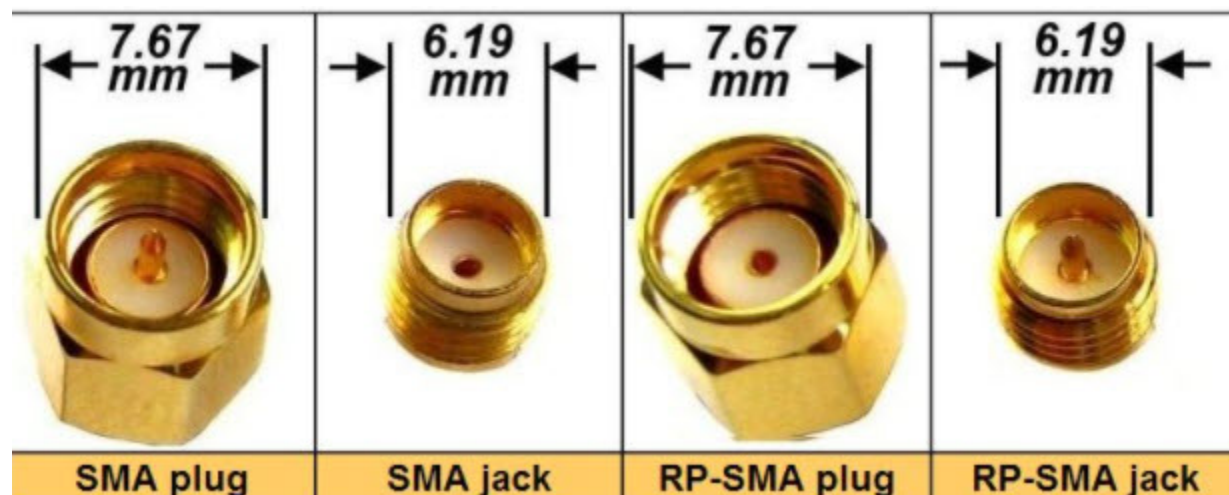
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The following tables are some of the more commonly used cables and accessories with the industrial routers and industrial wireless access points.

Throughout this guide you will see references to the different types of plugs and jacks used as connectors. The following figure shows the different types:



Cables

The following table provides information for other accessories supported by Cisco.

Table 1: N(m) to N(m) RF cables

Antenna Cable Type	Description	RF Loss
AIR-CAB002L240-N	N(m)-STR to N(m)-RA, LMR-240, 2 foot RF cable. Type: Indoor Interconnect. Not DB, CMR or CMP.	0.2dB @ 0.7 GHz 0.3dB @ 1.0 GHz 0.4dB @ 1.7 GHz 0.5dB @ 2.4 GHz 0.8dB @ 5.8 GHz
AIR-CAB005LL-N	N(m)-STR to N(m)-RA, LMR-400, 5 foot RF cable. Type: outdoor DB (direct burial).	0.2dB @ 0.7 GHz 0.3dB @ 1.0 GHz 0.4dB @ 1.7 GHz 0.5dB @ 2.4 GHz 0.8dB @ 5.8 GHz
CAB-L400-5-N-N	N(m)-STR to N(m)-RA, LMR-400, 5 foot RF cable. Type: outdoor DB (direct burial).	0.2dB @ 0.7 GHz 0.3dB @ 1.0 GHz 0.4dB @ 1.7 GHz 0.5dB @ 2.4 GHz 0.8dB @ 5.8 GHz

Antenna Cable Type	Description	RF Loss
CAB-L400-5-N-NS	N(m)-STR to N(m)-STR, LMR-400, 5 foot RF cable. Type: outdoor DB (direct burial).	0.2dB @ 0.7 GHz 0.3dB @ 1.0 GHz 0.4dB @ 1.7 GHz 0.5dB @ 2.4 GHz 0.8dB @ 5.8 GHz
AIR-CAB010LL-N	N(m)-STR to N(m)-RA, LMR-400, 10 foot RF cable. Type: outdoor DB (direct burial).	0.4dB @ 0.7 GHz 0.5dB @ 1.0 GHz 0.7dB @ 1.7 GHz 0.9dB @ 2.4 GHz 1.5dB @ 5.8 GHz
CAB-L400-20-N-N	N(m)-STR to N(m)-RA, LMR-400, 20 foot RF cable. Type: outdoor DB (direct burial).	0.8dB @ 0.7 GHz 1.0dB @ 1.0 GHz 1.3dB @ 1.7 GHz 1.6dB @ 2.4 GHz 2.5dB @ 5.8 GHz

Antenna Cable Type	Description	RF Loss
AIR-CAB025HZ-N	N(m)-STR to N(m)-STR, LMR-400, 25 foot RF cable. Type: outdoor DB (direct burial) with additional resistance to petrochemicals and oils.	1.0dB @ 0.7 GHz 1.2dB @ 1.0 GHz 1.6dB @ 1.7 GHz 2.0dB @ 2.4 GHz 3.1dB @ 5.8 GHz
CAB-L600-30-N-N	N(m)-STR to N(m)-RA, LMR-600, 30 foot RF cable. Type: outdoor DB (direct burial).	0.8dB @ 0.7 GHz 0.9dB @ 1.0 GHz 1.3dB @ 1.7 GHz 1.6dB @ 2.4 GHz 2.6dB @ 5.8 GHz

Table 2: N(m) to QMA(m) RF cables

Antenna Cable Type	Description	RF Loss
CAB-L240-10-Q-N	N(m)-STR to QMA(m)-RA, LMR-240, 10 foot RF cable. Type: FR/CMR (Communication Cable Riser).	0.8dB @ 0.7 GHz 0.9dB @ 1.0 GHz 1.2dB @ 1.7 GHz 1.5dB @ 2.4 GHz 2.4dB @ 5.8 GHz

Antenna Cable Type	Description	RF Loss
CAB-L240-15-Q-N	N(m)-STR to QMA(m)-RA LMR-240, 15 foot RF cable. Type: FR/CMR (Communication Cable Riser).	1.1dB @ 0.7 GHz 1.4dB @ 1.0 GHz 1.8dB @ 1.7 GHz 2.2dB @ 2.4 GHz 3.5dB @ 5.8 GHz
CAB-L240-20-Q-N	N(m)-STR to QMA(m)-RA, LMR-240, 20 foot RF cable. Type: FR/CMR (Communication Cable Riser)	1.5dB @ 0.7 GHz 1.8dB @ 1.0 GHz 2.4dB @ 1.7 GHz 2.9dB @ 2.4 GHz 4.7dB @ 5.8 GHz

Table 3: N(m) to RPTNC(jack) RF cables

Antenna Cable Type	Description	RF Loss
CAB-L240-10-N-R	N(m)-RA to RPTNC(jack)-STR, LMR-240, 10 foot RF cable. Type: outdoor DB (direct burial).	1.5dB @ 2.4 GHz 2.4dB @ 5.8 GHz
CAB-L400-20-N-R	N(m)-RA to RPTNC(jack)-STR, LMR-400, 20 foot RF cable Type: outdoor DB (direct burial)	1.6dB @ 2.4 GHz 2.5dB @ 5.8 GHz

Table 4: N(m) to RPTNC(plug) RF cables

Antenna Cable Type	Description	RF Loss
AIR-CAB005LL-R-N	N(m)-RA to RPTNC(plug)-STR, LMR-240, 5 foot RF cable. Type: outdoor DB (direct burial).	0.5dB @ 2.4 GHz 0.8dB @ 5.8 GHz

Table 5: RPTNC(plug)-STR to RPTNC(jack)-STR

Antenna Cable Type	Description	RF Loss
AIR-CAB005PL-R	RPTNC (plug)-STR to RPTNC (jack)-STR, LMR-195, 5 foot RF cable. Type: Plenum.	1.1dB @ 2.4 GHz 1.8dB @ 5.8 GHz
AIR-CAB005LL-R	RPTNC (plug)-STR to RPTNC (jack)-STR, LMR-400, 5 foot RF cable. Type: outdoor DB (direct burial).	0.5dB @ 2.4 GHz 0.8dB @ 5.8 GHz
CAB-L400-10-R	RPTNC (plug)-RA to RPTNC (jack)-STR, LMR-400, 10 foot RF cable. Type: outdoor DB (direct burial).	0.8dB @ 2.4 GHz 1.4dB @ 5.8 GHz
AIR-CAB020LL-R	RPTNC (plug)-STR to RPTNC (jack)-STR, LMR-400, 20 foot RF cable. Type: outdoor DB (direct burial).	1.3dB @ 2.4 GHz 2.5dB @ 5.8 GHz
AIR-CAB050LL-R	RPTNC (plug)-STR to RPTNC (jack)-STR, LMR-400, 50 foot RF cable. Type: outdoor DB (direct burial).	3.4dB @ 2.4 GHz 5.75dB @ 5.8 GHz
AIR-CAB100ULL-R	RPTNC (plug)-STR to RPTNC (jack)-STR, LMR-600, 100 foot RF cable. Type: outdoor DB (direct burial).	4.4dB @ 2.4 GHz 7.25dB @ 5.8 GHz

Table 6: N(m) to TNC(m) RF cable

Antenna Cable Type	Description	RF Loss
CAB-L400-20-TNC-N	TNC(m)-RA to N(m)-STR, LMR-400, 20 foot RF cable. Type: outdoor DB (direct burial).	0.8dB @ 0.7 GHz 1.0dB @ 1.0 GHz 1.3dB @ 1.7 GHz 1.6dB @ 2.4 GHz

Antenna Cable Type	Description	RF Loss
CAB-L400-50-TNC-N	TNC(m)-RA to N(m)-STR, LMR-400, 50 foot RF cable. Type: outdoor DB (direct burial)	1.9dB @ 0.7 GHz 2.3dB @ 1.0 GHz 3.1dB @ 1.7 GHz 3.8dB @ 2.4 GHz

Table 7: TNC(m) to TNC(f) RF cable

Antenna Cable Type	Description	RF Loss
4G-CAB-LMR400-10	TNC(m)-RA to TNC(f)-STR, LMR-400, 10 foot RF cable. Type: outdoor DB (direct burial).	0.4dB @ 0.7 GHz 0.5dB @ 1.0 GHz 0.7dB @ 1.7 GHz 0.8dB @ 2.4 GHz
4G-CAB-ULL-20	TNC(m)-RA to TNC(f)-STR, LMR-400, 20 foot RF cable. Type: Plenum.	0.8dB @ 0.7 GHz 1.0dB @ 1.0 GHz 1.3dB @ 1.7 GHz 1.6dB @ 2.4 GHz
4G-CAB-LMR240-25	TNC(m)-RA to TNC(f)-STR, LMR-240, 25 foot RF cable. Type: Plenum.	1.9dB @ 0.7 GHz 2.3dB @ 1.0 GHz 3.0dB @ 1.7 GHz 3.6dB @ 2.4 GHz

Antenna Cable Type	Description	RF Loss
4G-CAB-LMR240-50	TNC(m)-RA to TNC(f)-STR, LMR-240, 50 foot RF cable. Type: Plenum. Note The cable is not recommended for longer distance links due to high loss of 50 foot LMR240 at most cellular frequencies. The customer may need to do a site survey to validate whether the cable allows sufficient signal-to-noise ratio to or from cell tower.	3.7dB @ 0.7 GHz 4.5dB @ 1.0 GHz 5.9dB @ 1.7 GHz 7.2dB @ 2.4 GHz
4G-CAB-ULL-50	TNC(m)-RA to TNC(f)-STR, LMR-400, 50 foot RF cable. Type: Plenum.	1.9dB @ 0.7 GHz 2.3dB @ 1.0 GHz 3.1dB @ 1.7 GHz 3.8dB @ 2.4 GHz
4G-CAB-LMR240-75	TNC(m)-RA to TNC(f)-STR, LMR-240, 75 foot RF cable. Type: Plenum. Note Note: The cable is not recommended for high throughput or longer distance links due to high loss of 75 foot LMR240 at most cellular frequencies. The customer may need to do a site survey to validate whether the cable allows sufficient signal-to-noise ratio to or from cell tower.	5.5dB @ 0.7 GHz 6.7dB @ 1.0 GHz 8.8dB @ 1.7 GHz 10.7dB @ 2.4 GHz

Table 8: TNC(m) to SMA(m) RF cables

Antenna Cable Type	Description	RF Loss
CAB-L240-10-SM-TM	SMA(m)-STR to TNC(m)-STR, LMR-240, 10ft RF cable. Type: outdoor DB (direct burial).	0.8dB @ 0.7 GHz 0.9dB @ 1.0 GHz 1.2dB @ 1.7 GHz 1.5dB @ 2.4 GHz 1.6dB @ 2.7 GHz
CAB-L240-15-SM-TM	SMA(m)-STR to TNC(m)-STR, LMR-240, 15ft RF cable. Type: outdoor DB (direct burial).	1.1dB @ 0.7 GHz 1.4dB @ 1.0 GHz 1.8dB @ 1.7 GHz 2.2dB @ 2.4 GHz 2.3dB @ 2.7 GHz
CAB-L240-20-SM-TM	SMA(m)-STR to TNC(m)-STR, LMR-240, 20ft RF cable. Type: outdoor DB (direct burial).	1.5dB @ 0.7 GHz 1.8dB @ 1.0 GHz 2.4dB @ 1.7 GHz 2.9dB @ 2.4 GHz 3.1dB @ 2.7 GHz

Table 9: SMA(m) to SMA(f) cables

Antenna Cable Type	Description	RF Loss
CAB-L195-10-SM-SF	LMR-195, 10ft, cable Type: FR/CMR (Communication Cable Riser) SMA(m) to SMA(f)	1.2 dB @ 1.0 GHz
		2.2 dB @ 3.0 GHz
		3.0 dB @ 5.0 GHz
		3.6 dB @ 7.0 GHz
CAB-L240-20-SM-SF	LMR-240, 20ft cable SMA(m) to SMA(f) Type: FR-DB (direct burial)	1.6 dB @ 1.0 GHz
		2.9 dB @ 3.0 GHz
		3.8 dB @ 5.0 GHz
		4.6 dB @ 7.0 GHz

Table 10: SMA (m) to N(m) RF cables

Antenna Cable Type	Description	RF Loss
CAB-L240-10-SM-NM	LMR-240, 10ft cable SMA(m) to N(m) Type: FR-DB (direct burial)	0.9 dB @ 1.0 GHz
		1.5 dB @ 3.0 GHz
		2.0 dB @ 5.0 GHz
		2.4 dB @ 7.0 GHz

Table 11: RP-SMA(m) to N-type cables

Cisco PID	Description	RF Loss
CAB-L195-3-RSM-NF	LMR-195, 3 ft cable RP-SMA(m) to N(f) Type: FR/CMR (Communication Cable Riser)	0.5 dB @ 1.0 GHz
		0.9 dB @ 3.0 GHz
		1.2 dB @ 5.0 GHz
		1.5 dB @ 7.0 GHz
CAB-L195-3-RSM-NM	LMR-195, 3 ft cable RP-SMA(m) to N(m) Type: FR/CMR (Communication Cable Riser)	0.5 dB @ 1.0 GHz
		0.9 dB @ 3.0 GHz
		1.2 dB @ 5.0 GHz
		1.4 dB @ 7.0 GHz
CAB-L240-6-RSM-NF	LMR-240, 6 ft cable RP-SMA(m) to N(f) Type: FR/CMR (Communication Cable Riser)	0.6 dB @ 1.0 GHz
		1.1 dB @ 3.0 GHz
		1.5 dB @ 5.0 GHz
		1.8 dB @ 7.0 GHz

Cisco PID	Description	RF Loss
CAB-L240-6-RSM-NM	LMR-240, 6 ft cable	0.6 dB @ 1.0 GHz
	RP-SMA(m) to N(m)	1.1 dB @ 3.0 GHz
	Type: FR/CMR (Communication Cable Riser)	1.5 dB @ 5.0 GHz
		1.7 dB @ 7.0 GHz

Table 12: RP-SMA(m) to QMA(m) cables

Cisco PID	Description	RF Loss
CAB-L195-3-RSM-QM	LMR-195, 3 ft cable	0.6 dB @ 1.0 GHz
	RP-SMA(m) to QMA(m)	1.0 dB @ 3.0 GHz
	Type: FR/CMR (Communication Cable Riser)	1.4 dB @ 5.0 GHz
		1.6 dB @ 7.0 GHz
CAB-L240-6-RSM-QM	LMR-240, 6 ft cable	0.6 dB @ 1.0 GHz
	RP-SMA(m) to QMA(m)	1.1 dB @ 3.0 GHz
	Type: FR/CMR (Communication Cable Riser)	1.5 dB @ 5.0 GHz
		1.8 dB @ 7.0 GHz

Cellular Antenna Extension Bases

The following tables provide information for the Extension Bases supported by Cisco.

Table 13: Extension Bases

Extension Base PID	Description	RF Loss
4G-AE010-R	TNC(m)-STR to TNC(f)-STR, LMR-195, 10 foot, FR/CMR cable. Cable Type: FR/CMR (Communication Cable Riser)	1.1dB @ 0.7 GHz
		1.4dB @ 1.0 GHz
		1.8dB @ 1.7 GHz
		2.1dB @ 2.4 GHz
		2.3dB @ 2.7 GHz

Extension Base PID	Description	RF Loss
4G-AE015-R	TNC(m)-STR to TNC(f)-STR, LMR-195, 15 foot, FR/CMR cable. Cable Type: FR/CMR (Communication Cable Riser)	1.7dB @ 0.7 GHz 2.0dB @ 1.0 GHz 2.6dB @ 1.7 GHz 3.2dB @ 2.4 GHz 3.4dB @ 2.7 GHz
LTE-AE-MAG-SMA	TNC(f)-STR to SMA(f)-STR, LMR-195, 1ft FR/CMR cable. Cable Type: FR/CMR (Communication Cable Riser)	0.2dB @ 0.7 GHz 0.2dB @ 1.0 GHz 0.3dB @ 1.7 GHz 0.3dB @ 2.4 GHz 0.3dB @ 2.7 GHz

Accessories

Table 14: Cisco Lightning Arrestors

Cisco PID	Connectors Type	Arrestor Type and Frequency Range (MHz)
CGR-LA-NM-NF	N(m)-STR to N(f)-STR	DC to 7000 MHz, GDT type. Supports active GNSS antennas, passes DC. Note More details here .
ACC-LA-H-NM-NF	N(m)-STR to N(f)-STR	698 to 2700 MHz, High power, ultra low shunt impedance, HPF type. Does not pass DC, no support for active GNSS antennas.
CGR-LA-NF-NF	N(f)-STR to N(f)-STR	DC to 7000 MHz, GDT type. Supports active GNSS antennas, passes DC. Note More details here .

Cisco PID	Connectors Type	Arrestor Type and Frequency Range (MHz)
AIR-ACC245LA-R	RPTNC(jack)-STR to RPTNC(jack)-STR	DC to 6000 MHz, GDT type. Passes DC, but the RPTNC connectors are not commonly used with GNSS.
4G-ACC-OUT-LA	TNC(f)-STR to TNC(m)-STR	698 to 2700 MHz, HPF type, medium power. Does not pass DC, no support for active GNSS.
ACC-LA-G-TM-TF	TNC(f)-STR to TNC(m)-STR	DC to 6000 MHz, GDT type. Supports active GNSS antennas, passes DC.
ACC-LA-G-TF-TF	TNC(f)-STR to TNC(f)-STR	DC to 6000 MHz, GDT type. Supports active GNSS antennas, passes DC.

Table 15: Cisco Coaxial Adapters

Cisco PID	Connectors Type
AIR-ACC370-NM-RF	N(m)-STR to RPTNC(jack)-STR
AIR-ACC370-NF-NF	N(f)-STR to N(f)-STR
ANT-ADPTR-Q-TNC	QMA(m)-STR to TNC(f)-STR
LTE-ADPT-SM-TF	SMA(m)-STR to TNC(f)-STR

