



# Technical Specifications

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## Router Specifications

Table 1: Cisco Catalyst IR8340 Rugged Series Router Specifications

Environmental Ranges	
Operating temperature	-40°C to +60°C
Storage temperature	–40 to 185°F (–40 to 85°C)
Relative humidity	5 to 95% (noncondensing)
Operating altitude	Up to 10,000 ft (3048 m)
Physical Specifications	
Weight	Weight with 1 power supply (no modules): 24 lbs (10.9 kg)
	Typical weight fully configured with 2 power supplies 4 modules, timing module: 28 lb (12.7 kg)
Dimensions (H x W x D)	3.5 x 17.25 x 15 in. (88.9 x 438.2 x 381 mm)

Table 2: Cisco IR8340 Router Power Requirements

Power Requirements	
Nominal input voltage	PWR-RGD-AC-DC: 100 to 240 VAC, 50 to 60 Hz, 100 to 250 VDC PWR-RGD-AC-DC-250: 100 to 240 VAC, 50 to 60 Hz, 100 to 250 VDC PWR-RGD-LOW-DC: 24 to 60 VDC

Table 3: Power Consumption

Description	Specification
System power consumption (with no modules and POE)	Typical : 60W, Max : 86W
T1/E1 NIM power consumption	Typical : 6W, Max : 7W
RS232 NIM Power consumption	Typical : 6W, Max : 7W

## Power-Supply Module Specifications

Table 4: Power Supply Module Specifications

Model	Weight	Dimensions (H x W x D)
PWR-RGD-AC-DC-H	2.55 lb (1.15 kg)	1.58 x 7 x 5 in. (4 x 17.8 x 12.7 cm) (without mounting flanges)
PWR-RGD-DC-LOW-H	2.5 lb (1.13 kg)	1.58 x 7 x 5 in. (4 x 17.8 x 12.7 cm) (without mounting flanges)
PWR-RGD-LOW-DC-250	3.2 lb (1.45 kg)	1.58 x 7x 6.18 in. (4 x 17.8 x 15.7 cm) (with mounting flanges)



**Note** The power supplies listed are recommended for new installations. The older PWR-RGD-LOW-DC and PWR-RGD-AC-DC power supplies (without the -H suffix) are supported for users who already own them.

# Alarm Ratings

**Table 5: Alarm Input and Output Ratings**

Alarm Ratings	
Alarm input electrical specification	No external voltage needed to activate alarm inputs. The open circuit voltage between any Alarm input (1 to 2) and Alarm input Common is 5VDC and the loop current is 2 mA max per input.
Alarm output electrical specification	30VDC @ 1A, 48VDC @ 0.5A

# Thermal Mitigation

The following tables provide a description of thermal mitigation levels and throughput performance across all IoT industrial routers.

This applies to both the 4G LTE and 5G NR FR1 operation of the P-5GS6-GL.

**Table 6: Thermal Mitigation Levels**

Level	Description
Level 0	Normal mode, no thermal throttling.
Level 1	Uplink throttling, via reduced UL TX duty cycle.
Level 2	May include the following: <ul style="list-style-type: none"> <li>• DL throughput capability reduction, such as 4 RX &gt; 2 RX paths.</li> <li>• Drop Secondary Cells (SCells) all, or one by one.</li> <li>• 5G NR &gt; 4G LTE fall back.</li> <li>• MTPL backoff or reduced TX power.</li> <li>• Reduced UL communication range.</li> </ul>
Level 3	Limited service.  <b>Note</b> Limited service typically means emergency calls only. The P-5GS6-GL does not support emergency call mode, therefore limited service means “no service” for the P-5GS6-GL .
Thermal Shutdown	This occurs after Level 3.



**Note** Cisco does not recommend operation deep into level 2 as this may affect communication range via MTPL backoff.

**Table 7: Thermal Mitigation Table for P-LTEA7-XX modules – IR8340**

Hardware	Maximum Ambient Temperature (C/F)	Airflow (LFM)	Throughput Performance
IR8340	55°C/131°F	0	Normal
Single P-LTEA7-XX Single P-5GS6-GL	60°C/140°F	0	Throttled

**Table 8: Thermal Mitigation Table for P-5GS6-R16SA-GL modules – IR8340**

Hardware	Maximum Ambient Temperature (C/F)	Airflow (LFM)	Throughput Performance
IR8340	55°C/131°F	0	Normal
Single P-5GS6-R16SA-GL Single P-5GS6-GL	60°C/140°F	0	Throttled