Cisco AIR-PWRADPT-RGD2 Power Adapter Datasheet

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Overview

This document provides the specifications of the Cisco AIR-PWRADPT-RGD2= Power Adapter.



Note This power adapter is an OV (overvoltage) category II device per the NEC. For proper installation and requirements for branch circuit protection, isolation and surge protection when connected to an OV (overvoltage) category III or IV power source, please refer to national and local codes (for example, in the USA: NFPA 70, National Electric Code, and in Canada: Canadian Electrical Code)

In The Package

• One AC/DC power adapter with round connector and 3-pin IEC connector attached.

Technical Specifications

Output	DC Voltage ¹	48 V
	Rated Current	1.25 A
	Current Range	0~1.25 A
	Rated Power (Max)	60 W
	Ripple and Noise $(Max)^2$	240mVp-p
	Voltage Tolerance ³	±3.5%
	Line Regulation ⁴	±1.0%
	Load Regulation	±2.5%
	Setup, Rise Time ⁵	600ms, 30ms / 230 VAC
		600ms, 30ms / 115 VAC at full load
	Hold Up Time (Typ.)	50ms / 230 VAC
		15ms / 115 VAC at full load

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Input	Voltage Range ⁶	90 ~ 264 VAC
		135 ~ 370 VDC
	Frequency Range	47 ~ 63 Hz
	Efficiency (Typ.)	92%
	AC Current	1A / 230 VAC
		1.4A / 115 VAC
	Inrush Current (Max.)	65 A / 230 VAC
	Leakage Current (Max.)	0.75 mA / 240 VAC
Protection	Overload	$105 \sim 150\%$ rated output power
		Protection type—Hiccup mode, recovers automatically after fault condition is removed
	Over Voltage	50.4 ~ 64.8 V
		Protection type—Shut down o/p voltage, re-power on to recover
	Over Temperature	RTH2 > 80°C
		RTH2 > 176°F
		Protection type—Shut down o/p voltage, re-power on to recover
Environment	Working Temp	$-30 \sim +60^{\circ}\text{C}$
		$-22^{\circ}F \sim 140^{\circ}F$
		(Refer to output load derating curve)
	Working Humidity	20% - 90% RH non-condensing
	Intrusion Protection	IP67
	Storage Temp., Humidity	-30 ~ + 85°C, 10 ~95% RH
		-22°F ~ 185°F, 10 ~95% RH
	Temp. Coefficient	$\pm 0.03\% / \ ^{\circ}C \ (0 \sim 50 \ ^{\circ}C)$
	Vibration	$10 \sim 500 \text{ Hz}, 2G 10 \text{ min./1 cycle, period for } 60 \text{ min. each along}$ X, Y, Z axis

Safety and EMC	Withstand Voltage	I/P-O/P:3 KVAC, I/P-FG:2.0 KVAC, O/P-FG:0.5 KVAC
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500 VDC / 25°C/ 70% RH
	EMI Conduction and Radiation	EN55032 class B, FCC PART 15 / CISPR22 class B, CNS13438 class B, GB9254 class B
	Harmonic Current	Compliance to EN61000-3-2,3, GB17625.1
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A
Other	MTBF	555K Hours min. MIL-HDBK-217F(25°C)

¹ DC voltage: The output voltage set at point measure by plug terminal & 50% load.

² Ripple & noise are measured at 20 MHz by using a 12" twisted pair terminated with a 0.1μ F & 47μ F capacitor.

- ³ Tolerance: includes set up tolerance, line regulation, load regulation.
- ⁴ Line regulation is measured from low line to high line at rated load.
- ⁵ Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
- ⁶ Maximum input voltage is 305 VAC.

Mechanical Specifications

All measurements in the following figure are in mm.

Figure 1: AIR-PWRADPT-RGD2 Dimensions (Top View)

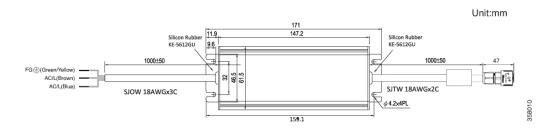


Figure 2: AIR-PWRADPT-RGD2 Dimensions (Side View)

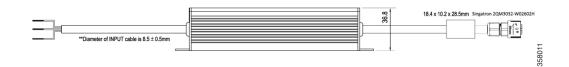
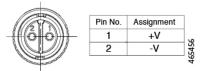


Figure 3: Pin Assignment in the Round Connector

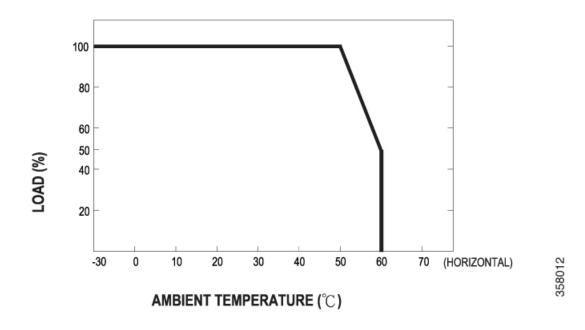


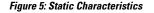
Power Supply De-Rating Statistics

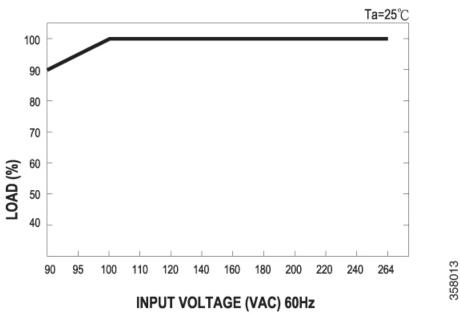
This section provides graphical representation of Cisco Aironet AIR-PWRADPT-RGD2= power adapter's load variation based on temperature and input voltage.

Figure 4: De-rating Curve

Derating Curve







Static Characteristics

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