

Grandstream Networks, Inc.

UCM6300 IPPBX Series

Technical Bulletin - Power Consumption



DOCUMENT PURPOSE

This document is a technical bulletin describing power consumption details for UCM63xx IPPBX Series.

UCM6xxx IPPBX series can be powered via

- Universal power supply: Input AC 100-240VAC 50/60Hz; Output 12VDC, 1.5A
- PoE: IEEE802.3af

TEST CONDITION TERMINOLOGY

The following test condition terminology was used in table 1.

- **Idle State**
 - The IPPBX has completed the boot-up process.
 - The SIP application is running PCMA codec with SRTP.
 - No call state established or incoming ring.
- **Work State**
 - The IPPBX is setup as described in the Idle State.
 - The maximum number of calls are established for each Unit Under Test (UUT).
 - USB port loaded at 200mA.
- **Power Not to Exceed**
 - 1REN loaded on each FXS port of UUT and ring established.
 - USB port loaded at 500mA.



1. Power Dissipation

Table 1: Power Dissipation and Advertisement

Product	Power Adapter (12VDC)				PoE (48VDC)				Class Advertisement (IEEE 802.3af)
	Idle State	Work State	Power Not to Exceed		Idle State	Work State	Power Not to Exceed		
	Power (W)	Power (W)	FXS Port Loaded	Power (W)	Power (W)	Power (W)	FXS Port Loaded	Power (W)	
UCM6300 Series									
UCM6301	6.20	11.10	America	13.10	7.80	13.10	America	16.20	4
UCM6302	6.30	11.50	America	13.20	7.80	13.70	America	16.50	4
UCM6304	9.30	16.72	America	18.75	10.62	17.97	America	20.47	4
UCM6308	9.69	21.09	America	22.81	10.94	23.44	America	24.73	4
UCM6300 Audio Series									
UCM6300A	6.10	9.80	/	12.80	7.50	12.40	/	15.50	4
UCM6302A	6.20	11.30	America	13.10	7.70	13.50	America	16.30	4
UCM6304A	9.22	12.90	America	15.50	10.50	15.80	America	19.10	4
UCM6308A	9.40	20.10	America	22.70	10.80	21.80	America	24.40	4

2. PD Power Classification

Table 2: PD Power Classification (IEEE 802.3af)

Class	Usage	Max Power Range used by the PD (IPPBX)
0	Default	0.44 to 12.95W
1	Optional	0.44 to 3.84W
2	Optional	3.84 to 6.49W
3	Optional	6.49 to 12.95W
4	Optional	12.95 to 25.5W

