Grandstream Networks, Inc.

GXP IP Phones

Power Consumption Technical Bulletin

1. Power Dissipation and Advertisement

Table 1: Power Dissipation and Advertisement

Product	Power Adapter (5VDC for GXP16xx/GXP17xx, 12VDC for GXP21xx)			PoE (48VDC)			Class Advertisement (IEEE 802.3af)
	Idle State (W)	Work State (W)	Power Not to Exceed (W)	Idle State (W)	Work State (W)	Power Not to Exceed (W)	
GXP1610	0.81	1.56	2.30	N/A	N/A	N/A	N/A
GXP1615	0.81	1.56	2.30	1.40	1.73	3.01	2
GXP1620	0.92	1.65	2.39	N/A	N/A	N/A	N/A
GXP1625	0.92	1.65	2.39	1.52	2.32	3.14	2
GXP1628	1.12	2.01	3.01	2.23	2.66	4.02	2
GXP1630	1.06	2.55	3.25	1.69	2.85	3.91	2
GXP1760	1.40	2.96	3.96	1.63	3.19	6.18	2
GXP1780 GXP1782	1.56	3.11	4.16	1.83	3.48	6.46	2
GXP2130	2.76	3.27	3.60	3.16	3.59	4.56	2
GXP2135	2.73	3.12	3.26	3.11	3.33	4.00	2
GXP2140	2.28	3.66	7.90	2.64	3.89	9.60	3
GXP2140+4EXT[C]	N/A	N/A	9.56	N/A	N/A	12.58	3
GXP2160	2.98	4.04	8.78	3.19	4.47	10.25	3
GXP2170	2.71	3.55	7.98	3.15	3.88	9.30	0
GXP2170+4EXT[C]	N/A	N/A	9.46	N/A	N/A	12.66	0

Notes:

1. EXT[C] is GXP2200EXT Extension Module.

2. GXP21XX+4EXT[C] tested with connecting USB port loads=0.35A.

3. Class Advertisement Refer to Table 2 for IEEE 802.3af Classification at PD.

2. PD Power Classification

Class	Usage	Max Power Range used by the PD (phone)
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	Not Allowed	Reserved for future use (for example: IEEE802.3at)

3. Test Condition Terminology

The following test condition terminology was used in Table 1.

- **Idle State**

  - The phone has completed the boot-up process.
  - The SIP application was running PCMA codec with SRTP.
  - The idle screen was shown on the LCD.
  - LCD Backlight (Normal brightness).

- **Work State**

  - The phone was setup as described in the Idle State.
  - The maximum number of calls were established for each Unit Under Test (UUT).
  - The Handsfree mode was activated for each UUT and was set to maximum volume.
  - The LCD displayed at the Diagnostic during the test.

- **Power Not Exceed**

  - +nEXT means connected to n Extension Module(s), n=1, 2, 3 or 4.
  - EXT work condition: All indicator LEDs are light on.
  - External USB device in Max Power.
  - GXP17XX USB port loads=0.3A.
  - Ring state or Called state.