IP Phone Technical Bulletin

Power Consumption of BudgeTone and Enterprise IP Phones Series

1.Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product Model	Power Adapter Model			POE Model			Class Advertisement（IEEE 802.3af）
		Standby	Operating	Max Power	Standby	Operating	Max Power	
		Power(W)	Power(W)	Power(W)	Power(W)	Power(W)	Power(W)	
1	BT200	2.450	2.780	2.880	N/A	N/A	N/A	N/A
2	GXP280	1.950	2.038	2.253	N/A	N/A	N/A	N/A
3	GXP285	1.950	2.038	2.253	2.592	2.736	3.200	1
4	GXP1200	2.430	2.890	2.890	4.890	5.460	5.460	0
5	GXP2000	2.420	3.140	3.190	5.080	5.890	5.940	0
6	GXP2000+1EXT[A]	3.010	3.640	3.680	5.700	6.510	6.560	0
7	GXP2000+2EXT[A]	3.470	4.130	4.140	6.320	7.140	7.230	0
8	GXP2010	2.490	2.840	3.110	3.450	3.990	4.180	0
9	GXP2010+1EXT[B]	2.920	3.400	3.640	3.840	4.520	4.670	0
10	GXP2010+2EXT[B]	3.400	3.900	4.190	4.470	5.010	5.150	0
11	GXP2020	2.950	3.750	3.820	3.850	4.760	4.960	0
12	GXP2020+1EXT[B]	3.400	4.270	4.370	4.530	5.250	5.440	0
13	GXP2020+2EXT[B]	3.930	4.830	4.920	4.910	5.880	5.980	0
14	GXP2120	1.413	1.567	2.509	1.923	2.157	3.189	2
15	GXP2120+1EXT[B]	1.859	2.043	3.256	2.439	2.720	4.174	2
16	GXP2120+2EXT[B]	2.355	2.529	3.994	3.095	3.424	5.159	2
17	GXP2110	1.423	1.556	2.452	1.970	2.111	3.236	2
18	GXP2110+1EXT[B]	1.869	2.007	3.190	2.486	2.673	4.174	2
19	GXP2110+2EXT[B]	2.345	2.473	3.917	3.095	3.330	5.206	2
20	GXP2100	1.459	1.679	2.304	1.829	2.017	3.095	1
21	GXP1450	1.434	1.792	1.946	1.912	2.389	2.595	1
22	GXP1400	1.306	1.628	1.741	N/A	N/A	N/A	N/A
23	GXP1405	1.306	1.628	1.741	1.741	2.171	2.321	1
24	GXP1401	0.742	1.014	1.152	N/A	N/A	N/A	N/A
25	GXP1100	0.717	0.973	1.075	N/A	N/A	N/A	N/A
26	GXP1105	0.717	0.973	1.075	1.008	1.35	1.584	1

Note： **1).EXT[A] is GXP2000EXT Extension Module.**
2).EXT[B] is GXP2010/GXP2020EXT Extension Module.
3).Class Advertisement Refer to Table 2 for IEEE 802.3af Classification at PD.
4).The Power of EXT[A] and EXT[B] was supplied by GXP2010/GXP2020 directly.

2.PD Power Classification

Table 2: PD Power Classification (IEEE 802.3af)

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: IEEE802.3af)

3.Test Condition Terminology

The following test condition terminology was used in Table 1

- **Standby**
  - — 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).
  - — There was no call state established.

• **Operating**

— 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 screen during the test.
— BT200/GXP280 just use handfree mode.

• **Max Power**

— +1EXT mean connect to one Extension Module, +2EXT mean connect to two Extension Modules.
— EXT work condition: All Indicator LEDs are lighting.

Video Phone Technical Bulletin

Power Consumption of Video Phone Series

1.Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product Model	Power Adapter Model			POE Model			Class Advertisement（IEEE 802.3af）
		Standby	Operating	Max Power	Standby	Operating	Max Power	
		Power(W)	Power(W)	Power(W)	Power(W)	Power(W)	Power(W)	
1	GXV3000	6.12	6.36	10.68	N/A	N/A	N/A	N/A
2	GXV3005	6.24	6.36	10.68	N/A	N/A	N/A	N/A
3	GXV3006	6.96	7.32	13.16	N/A	N/A	N/A	N/A
4	GXV3140	3.48	3.72	7.08	N/A	N/A	N/A	N/A
5	GXV3141	4.32	4.56	11.88	N/A	N/A	N/A	N/A
6	GXV3140H	3.72	3.84	7.18	N/A	N/A	N/A	N/A
7	GXV3174	5.74	7.84	16	N/A	N/A	N/A	N/A
8	GXV3175	6.236	8.385	16.8	7.483	10.062	13	0

Note： 1).13 (PoE)^{A} is GXV3175 powered by PoE. In this case, USB peripheral should not exceed 900mA.
2).16.8 (Adapter)^{B} is GXV3175 powered by Adapter (12V/1.5A). In this case, USB peripheral should not exceed 1200mA.

Video Phone model differences							
Module	LCD size	Camera	Integrated WIFI	PoE	USB ports	FXS port	FXO port
GXV3000	5.6 inch, 320*3 (RGB) *234	0.3 mega	N/A	N/A	2	N/A	N/A
GXV3005	5.6 inch, 320*3 (RGB) *234	0.3 mega	N/A	N/A	2	N/A	YES
GXV3006	5.6 inch, 320*3 (RGB) *234	0.3 mega	N/A	N/A	2	YES	N/A
GXV3140	4.3 inch, 480*3 (RGB) *272	1.3 mega	N/A	N/A	1	N/A	N/A
GXV3141	4.3 inch, 480*3 (RGB) *272	1.3 mega	N/A	N/A	1	YES	N/A
GXV3140H	4.3 inch, 480*3 (RGB) *272	0.3 mega	N/A	N/A	1	N/A	N/A
GXV3174	7 inch, 800*3 (RGB) *480	1.3 mega	N/A	N/A	2	N/A	N/A
GXV3175	7 inch, 800*3 (RGB) *480	1.3 mega	YES	YES	2	N/A	N/A

2.Test Condition Terminology

The following test condition terminology was used in Table 1

• Standby

— The phone has completed the boot-up process.
— The SIP application was running PCMU codec with SRTP.
— The idle screen was shown on the LCD.
— LCD Backlight (Default brightness).
— No established call.
— Insert WIFI USB Adapter (GXV314x).
— Open internal WIFI (GXV3175).

• Operating

— The phone was setup as described in the Idle State.
— The maximum number of calls were established for each Unit Under Test (UUT).
— LCD Backlight (Default setting).
— The LCD worked at diagnostic screen during the test.
— Open internal WIFI (GXV3175).

• Max Power

— LCD Backlight (maximum setting).
— Video Phone worked at Handsfree mode and voice is set to maximum volume.
— USB WIFI loaded at150mA (GXV314x).
— Open internal WIFI (GXV3175).
— USB port loaded at 1200mA (power adapter) (GXV3175).
— USB port loaded at 925mA (power POE) (GXV3175).

IP Surveillance Technical Bulletin

Power Consumption of IP Surveillance Series

1.Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	Power Adapter(12VDC)			POE （48VDC）			Class Advertisement（IEEE 802.3af）
		Idle State	Work State	Stress work State	Idle State	Work State	Stress work State	
		Power(W)	Power(W)	Power(W)	Power(W)	Power(W)	Power(W)	
1	GXV3504	2.82	2.98	4.62	3.07	3.94	5.66	0
2	GXV3501	2.11	2.42	3.10	2.50	2.93	4.42	0
3	GXV3601	3.34	3.60	4.18	3.84	4.70	5.76	0

2.PD Power Classification

Table 2: PD Power Classification (IEEE 802.3af)

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: IEEE802.3af)

3.Test Condition Terminology

The following test condition terminology was used in Table 1.

- **Idle State**
  - — The IP Surveillance has completed the boot-up process
  - — There was no Video input
- **Work State**
  - — The IP Surveillance was setup as described in the Idle State
  - — Video input /output/Audio were working
  - — The UUT Connected to PC and logined WEB page
- **Stress working State**
  - — The IP Surveillance was setup as described in the Working State
  - — USB disk and SD card Loaded
  - — Audio in and Line In/Out working
  - — Alarm in and alarm out working
  - — The talk was established and record working

ATA Technical Bulletin

Power Consumption of ATA Series

1.Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	Power Adapter(5VDC)			
		Idle State	Work State	Power Not to Exceed	
		Power (W)	Power (W)	3RENs Loaded	Power (W)
1	HT286	1.30	2.70	Europe	2.50
				America	2.55
2	HT486	1.80	3.00	Europe	3.50
				America	4.00

ITEM	Product	Power Adapter(12VDC)			
		Idle State	Work State	Power Not to Exceed	
		Power(W)	Power(W)	3RENs Loaded	Power(W)
3	HT502	2.69	3.86	Europe	5.28
				America	5.40
4	HT503	2.74	3.52	Europe	3.82
				America	4.32

2.Test Condition Terminology

The following test condition terminology was used in Table 1.

- **Idle State**

— The ATA has completed the boot-up process.
— The SIP application was running PCMA codec with SRTP.
— No established call and no coming Ring.

- **Work State**

— The ATA was setup as described in the Idle State.
— The maximum number of calls were established for each Unit Under Test (UUT).
— The Phone which connected to UUT FXS port worked at Handfree mode and was set to maximum volume.

- **Power Not to Exceed**

— 3RENs loaded on each FXS port of UUT and ring established.

Gateway Technical Bulletin

Power Consumption of Gateway Series

1.Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	Power Adapter(12VDC)			
		Idle State	Work State	Power Not to Exceed	
		Power(W)	Power(W)	3RENs Loaded	Power(W)
1	GXW4004	5.04	5.52	Europe	6.24
				America	7.32
2	GXW4008	6.96	9.24	Europe	13.20
				America	14.40
3	GXW4024	18.84	27.48	Europe	26.76
				America	28.56
4	GXW4104	2.64	2.76	2.76	
5	GXW4108	3.60	3.84	3.84	

Note： 1).GXW4004 ,GXW4008:With FXO port
2).GXW4104,GXW4108,GXW4024:With FXS port

2.Test Condition Terminology

The following test condition terminology was used in Table 1

- **Idle State**
  — The gateway has completed the boot-up process
  — The SIP application was running PCMA codec with SRTP
  — No established call and no coming ring
- **Work State**
  — The Gateway was setup as described in the Idle State
  — A single call was established for each Unit Under Test (UUT)
- **Power Not to Exceed**
  — 3RENs loaded on each FXS port of UUT and ring established

IPPBX Technical Bulletin

Power Consumption of IPPBX Series

1.Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	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 3RENs loaded	Power(W)	Power(W)	Power(W)	FXS port 3RENs loaded	Power(W)	
1	GXE5024	4.68	5.64	Europe	8.98	5.76	7.20	Europe	10.66	0
				America	9.58			America	11.14	0
2	GXE5028	5.64	6.48	Europe	9.94	6.72	8.16	Europe	11.62	0
				America	10.54			America	12.10	0

2.PD Power Classification

Table 2: PD Power Classification (IEEE 802.3af)

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: IEEE802.3af)

3.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 and no coming ring
- **Work State**
  - — The IPPBX was setup as described in the Idle State.
  - — The maximum number of calls were established for each Unit Under Test (UU
  - — USB port loaded at 200mA
- **Power Not to Exceed**
  - — 3RENs loaded on each FXS port of UUT and ring established
  - — USB port loaded at 500mA