



IP Phone Technical Bulletin

Power Consumption of BudgeTone and Enterprise IP Phones Series

1.Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	Power Adapter(5.12VDC)			POE (46.9VDC)			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)	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	2
21	GXP2124	1.256	1.606	4.24	1.812	2.312	4.64	2
22	GXP1450	1.434	1.792	1.946	1.912	2.389	2.595	2
23	GXP1400	1.306	1.628	1.741	N/A	N/A	N/A	N/A
24	GXP1405	1.306	1.628	1.741	1.741	2.171	2.321	2
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	1.350	1.584	2
27	GXP1160	1.433	1.526~2.69	2.690	N/A	N/A	N/A	N/A
28	GXP1165	1.433	1.526~2.69	2.869	2.112	2.318~3.853	3.853	2

ITEM	Product	Power Adapter(12VDC)			POE (46.9VDC)			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)	Power(W)	Power(W)	Power(W)	Power(W)	
1	GXP2200	1.944	3.524	6.926	4.419	4.775	6.626	0
2	GXP2200+1EXT ^C	2.916	4.617	8.141	5.774	6.130	7.983	0
3	GXP2200+2EXT ^C	4.010	5.711	9.113	7.128	7.485	9.338	0
4	GXP2200+3EXT ^C	4.982	6.561	10.206	8.485	8.841	10.694	0
5	GXP2200+4EXT ^C	6.075	7.533	11.300	9.840	10.196	12.049	0

- Note: 1).EXT^A is GXP2000EXT Extension Module.
 2).EXT^B is GXP2010/GXP2020EXT Extension Module.
 3).EXT^C is GXP2200EXT Extension Module.
 4).Class Advertisement Refer to Table 2 for IEEE 802.3af Classification at PD.
 5).The Power of EXT^A and EXT^B is 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

• **Idle State**

- The phone has completed the boot-up process.
- The SIP application is running PCMA codec with SRTP.
- The idle screen is shown on the LCD.
- LCD Backlight (Normal brightness).
- There is no call state established.

• **Work State**

- The phone is setup as described in the Idle State.
- The maximum number of calls are established for each Unit Under Test (UUT).
- The Handsfree mode is activated for each UUT and set to maximum volume.
- The LCD displayed at the Diagnostic screen during the test.
- BT200/GXP280 are using handfree mode.

• **EXT mode**

- +nEXT means connect to n Extension Module(s), n=1,2,3,4.
- EXT work condition: All Indicator LEDs are lighting up.



Video Phone Technical Bulletin

Power Consumption of Video Phone Series

1. Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	Power Adapter Mode			POE Mode			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 V1.0	3.48	3.72	7.08	N/A	N/A	N/A	N/A
5	GXV3140 V2.1	3.55	4.32	7.21	N/A	N/A	N/A	N/A
6	GXV3140 V2.2	3.67	4.46	7.37	4.26	5.42	8.72	Class 0
7	GXV3175 V1.4	6.236	8.385	16.8	7.483	10.062	13	Class 0
8	GXV3175 V2.5	6.36	7.71	14.08	7.53	9.146	13	Class 0

Video Phone model differences						
Model	LCD size	Integrated WIFI	PoE	USB ports	FXS port	FXO port
GXV3000	5.6inch,320*3RGB*234	N/A	N/A	2	N/A	N/A
GXV3005	5.6inch,320*3RGB*234	N/A	N/A	2	N/A	YES
GXV3006	5.6inch,320*3RGB*234	N/A	N/A	2	YES	N/A
GXV3140	4.3inch,480*3RGB*272	N/A	YES	1	N/A	N/A
GXV3175	7inch800*3(RGB)*480	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 is running PCMU codec with SRTP.
- The idle screen is shown on the LCD.
- LCD Backlight is set to 10 (The brightest backlight).
- No established call.

• Operating

- Operating 1: Handset Audio Call; Volume: 7 or 9; Backlight: 10; Codec: PCMU; Do not connect external device
- Operating 2: Handfree Audio Call; Volume: 7 or 9; Backlight: 10; Codec: PCMU; Do not connect external device
- Operating 3: Ringing; Volume: 7 or 9; Backlight: 10; Codec: PCMU; Do not connect external device
- Operating 4: Video Call; Volume: 9; Backlight: 10; Codec: H264; Video rate: 1024kbps; Do not connect external device
- Operating 5: Viewing Pictures; Backlight: 10; Connect with SD CARD
- Operating 6: Video Playing; Volume: 9; Backlight: 10; Connect with SD CARD to play the video in it
- Operating 7: Video Playing with HDMI Output; Volume: 9; Backlight: 10; Connect with TV to play video
- Operating 8: USB driver running; Volume: 9; Backlight: 10; Connect with USB Flash Drive, USB keyboard or USB mouse
- Operating 9: Wi-Fi Connected; Volume: 9; Backlight: 10; Connected with built-in Wi-Fi

• Max Power

- Volume: 9; Backlight: 10
- Video Phone working at Handsfree mode
- Using internal WI-FI (GXV3175)
- USB port loaded at 500mA (GXV3140 with power adapter)
- USB port loaded at 1000mA (GXV3175 with power adapter)



IP Surveillance Technical Bulletin

Power Consumption of IP Surveillance

1. Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	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	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_P	2.95	3.80	5.28	3.84	4.70	5.76	0
4	GXV3601_N	2.95	3.80	5.28	3.84	4.70	5.76	0
5	GXV3601_LL	3.00	3.90	4.96	3.84	4.70	5.76	0
6	GXV3601_HD	3.06	3.95	5.00	3.84	4.70	5.76	0
7	GXV3611_HD	2.70	4.10	6.67	3.36	4.20	6.80	0
8	GXV3611_LL	2.30	3.40	6.05	3.36	4.20	6.40	0
9	GXV3615	1.68	2.24	3.92	2.40	3.84	4.30	0
10	GXV3615W	2.16	3.03	4.48	N/A	N/A	N/A	N/A
11	GXV3651_FHD	1.71	2.68	5.12	2.22	3.36	6.21	0
12	GXV3662_HD	1.68	2.83	10.30	2.15	3.58	8.61	0
13	GXV3500	1.49	1.55	1.60	1.93	1.98	2.05	0
14	GXV3615WP_HD	2.48	2.54	3.34	3.45	3.65	5.12	0
15	GXV3672_HD	1.60	1.67	11.10	2.02	2.12	6.05	0
16	GXV3672_FHD	2.00	2.20	11.50	2.70	2.79	6.87	0
17	GXV3662_FHD	3.36	3.79	11.26	4.03	4.52	9.55	0

2. Test Condition Terminology

The following test condition terminology is used in Table 1

• **Standby**

- The IP Surveillance has completed the boot-up process
- There is no Video input

• **Operating**

- The IP Surveillance is setup as described in the Idle State
- Video input /output/Audio are working
- The UUT is connected to PC with Web page logged in

• **Max Power**

- Maximum external devices connected to the IP Surveillance device



ATA Technical Bulletin

Power Consumption of ATA Series

1. Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	VER	Power Adapter Model			
			Standby	Operating	Max Power	
			Power (W)	Power (W)	3RENs Loaded	Power (W)
1	HT286		1.30	2.60	Europe	2.30
					America	3.00
2	HT486		1.80	3.00	Europe	3.50
					America	4.00
ITEM	Product	VER	Power Adapter Model			
			Standby	Operating	Max Power	
			Power(W)	Power(W)	3RENs Loaded	Power(W)
3	HT502	V2.0	2.26	3.36	Europe	4.43
					America	4.64
4	HT503		2.74	3.52	Europe	3.82
					America	4.32
ITEM	Product	VER	Power Adapter Model			
			Standby	Operating	Max Power	
			Power(W)	Power(W)	3RENs Loaded	Power(W)
5	HT701	V3.0	1.05	1.73	Europe	4.85
					America	3.95
6	HT702	V2.0	1.35	2.93	Europe	5.70
					America	6.05
7	HT704		1.60	4.21	Europe	4.57
					America	9.27
ITEM	Product	VER	Standby Power(W)	Operating Power(W)	Max Power Power(W)	
8	DP715 B/S		0.88W	1.0W	1.2W	
ITEM	Product	VER	2 rechargeable batteries(AAA, 1.2V/500mAh, NiMH)			
ITEM	Product	VER	Charging	Standby	Talking	
			Time(Hour)	Time(Hour)	Time(Hour)	
9	DP715 H/S DP710 H/S		16H	80H	10H	

2. Test Condition Terminology

The following test condition terminology is used in Table 1.

• **Standby**

- The ATA has completed the boot-up process.
- The SIP application is running using PCMA codec with SRTP.
- No established call and no incoming ring.

• **Operating**

- The ATA is set up as described in the Idle State.
- The maximum number of calls are established for each Unit Under Test (UUT).
- The Phone connected to UUT FXS port is working at Handfree mode and set to maximum volume.

• **Max Power**

- 3RENs loaded on each FXS port of UUT and ring established for all HT7xx except HT701.
- 5RENs loaded on FXS port of HT701 and ring established.



Gateway Technical Bulletin

Power Consumption of Gateway Series

1. Power Dissipation

Table 1: Power Dissipation and Advertisement

ITEM	Product	Version	Power Adapter Model			
			Standby	Operating	Max Power	
			Power (W)	Power (W)	3RENs Loaded	Power (W)
1	GXW4004		3.60	6.10	Europe	6.21
					America	8.92
2	GXW4008		7.63	12.06	Europe	12.18
					America	17.72
3	GXW4024		20.40	24.30	Europe	23.99
					America	43.36

ITEM	Product	Version	Power Adapter Model		
			Standby	Operating	Max Power
			Power(W)	Power(W)	Power(W)
4	GXW4104		3.58	3.78	3.78
5	GXW4108		3.91	4.27	4.27

ITEM	Product	Version	Power Adapter Model			
			Standby	Operating	Max Power	
			Power(W)	Power(W)	2RENs Loaded	Power(W)
6	GXW4216		2.69	15.31	Europe	24.00
					America	26.40
7	GXW4224		4.00	22.58	Europe	36.79
					America	39.38
8	GXW4232		4.15	29.59	Europe	43.70
					America	46.02
9	GXW4248	V1.0A	5.20	9.00	Europe	45.50
					America	50.90

Note:

- 1).GXW4216/24/32 and GXW4248 is running with IP call.
- 2).GXW4216/24/32 contains a FAN (MAX current :92mA); GXW4248 contain two. FAN is off in the test.

2. Test Condition Terminology

The following test condition terminology is used in Table 1.

• Standby

- The device has completed the boot-up process.
- The SIP application is running PCMA codec with SRTP.
- No established call or incoming ring.

- **Operating**

- The device is setup as described in the Idle State.
- The maximum number of calls are established for each Unit Under Test (UUT).
- The Phone connected to UUT FXS port is working at Handfree mode and set to maximum volume.
- One Phone connected to GXW4248 FXS port is working at Handfree mode and set to maximum volume.

- **Max Power**

- 3RENs loaded on each FXS port of UUT and ring established for all GXW40XX.
- 2RENs loaded on each FXS port of UUT and ring established for all GXW42XX.



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	4.20	6.22	Europe	6.72	5.64	7.68	Europe	8.11	0
				America	8.01			America	10.11	0
2	GXE5028	4.95	6.75	Europe	7.60	6.32	8.11	Europe	8.21	0
				America	8.68			America	9.94	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 is 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**

- 3RENs loaded on each FXS port of UUT and ring established
- USB port loaded at 500mA