

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
1	GXP1100	0.999	1.267	1.590	N/A	N/A	N/A	N/A
2	GXP1105	0.999	1.267	1.590	1.459	1.816	2.032	2
3	GXP1160	1.791	2.081	3.129	N/A	N/A	N/A	N/A
4	GXP1165	1.791	2.081	3.129	2.544	2.986	4.416	2
6	GXP1400	1.561	1.869	2.107	N/A	N/A	N/A	N/A
7	GXP1405	1.561	1.869	2.107	2.260	2.672	.	2
8	GXP1450	1.834	2.053	2.391	2.668	2.910	3.686	2
9	GXP2100	2.036	2.360	3.219	2.750	3.730	4.300	2
10	GXP2124	1.193	1.933	2.822	1.989	3.138	3.918	2
11	GXP1610	0.665	1.336	1.928		N/A	N/A	N/A
12	GXP1620	0.680	1.378	1.992		N/A	N/A	N/A
13	GXP1625	0.680	1.378	1.992	1.070	2.051	2.702	1
14	GXP1628	0.815	1.414	2.080	1.216	2.108	2.710	1
15	GXP1630	0.870	1.483	2.102	1.356	2.195	2.803	1
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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	3.678	3.920	12.382	4.511	4.705	14.599	0
2	GXP2200+1EXT ^C		4.918	9.135		5.855	10.946	0
3	GXP2200+2EXT ^C		5.916	10.133		7.004	12.095	0
4	GXP2200+3EXT ^C		6.914	11.131		8.153	13.245	0
5	GXP2200+4EXT ^C		7.912	12.129		9.303	14.394	0
6	GXP2140	1.442	2.161	5.490	2.290	2.626	6.789	3
7	GXP2140+1EXT ^C	2.660	3.520	6.619	3.420	4.430	8.027	3
8	GXP2140+2EXT ^C	3.560	4.420	7.541	4.590	5.390	9.260	3
9	GXP2140+3EXT ^C	4.510	5.330	8.754	5.650	6.340	10.419	3
10	GXP2140+4EXT ^C	5.470	6.200	9.674	6.710	7.610	11.802	3
11	GXP2160	1.454	2.171	6.003	2.400	2.814	7.487	3
12	GXP2130	1.870	1.955	2.086	1.970	2.296	2.408	2
13	GXP2170	1.879	3.762	7.188	3.447	5.145	9.571	3
14	GXP2170+4EXT ^C	5.785	7.574	11.009	8.223	9.937	14.171	3
15	GXP2135	1.176	1.656	2.748	1.968	2.160	3.504	2

- 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 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

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

- **Power Not to Exceed**

- +nEXT means connect to n Extension Module(s), n=1,2,3,4.
- EXT work condition: All Indicator LEDs are lighting.
- External USB device in Max Power
- EXT work condition: All Indicator LEDs are lighting.
- Ring state or Called state