

Grandstream Networks, Inc.

DP750 Technical Bulletin

Power Consumption



DOCUMENT PURPOSE

This document is a technical bulletin describing power consumption details for DP750 base station.

DP750 base station can be powered via one of the following:

- Universal power supply (input AC 100-240V 50/60Hz; output 5VDC, 1A);
- Micro-USB connection;
- PoE: IEEE802.3af Class 1, 0.44W–3.84W.

TEST CONDITION TERMINOLOGY

The following test condition terminology was used in table 1.

- **Idle State**
 - The base has boot-up, and with one registered handset in idle state.
 - Connect to the LAN network.
- **Work State**
 - The base running IP call with one handset registered.
 - The handset set the maximum volume during the IP call.
- **Power Not Exceed**
 - 5 handsets are registered to the base, and 4 handsets were running four lines IP call at same time.
 - The handsets set the maximum volume during IP call.



1. Power Dissipation

Table 1: Power Dissipation and Advertisement

| 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 | |
| DP750 | 0.791W | 0.897W | 1.147W | 1.308W | 1.448W | 1.815W | 1 |

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) |

