# Keypad & PoE Device Power Consumption

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## Keypad & PoE Device Power Consumption

PoE devices receive Ethernet data AND power through a CAT 5/6 cable.  Switches capable of providing PoE, PoE+ or PoE++ can power devices such as keypads, touchpanels, audio devices, and IP cameras.

The table below details the current draw (mA) and amount of power (Watts) required for the various URC devices.

| Keypad &Touchscreen Models | LCD Off or in Sleep Mode Power Consumption | | Average Power Consumption (PoE 48V) | | Maximum Power Consumption (PoE 48V) | | Notes |
|---|---|---|---|---|---|---|---|
| | Current | Watts | Current | Watts | Current | Watts | |
| TKP-100 | 35 mA | 1.68 W | 35 mA | 1.68 W | 37 mA | 1.78 W | 10/100 Ethernet |
| TKP-2000N | 40 mA | 1.92 W | 45 mA | 2.16 W | 50 mA | 2.40 W | 10/100 Ethernet |
| TKP-7000 | 60 mA | 2.88 W | 85 mA | 4.08 W | 100 mA | 4.80 W | 10/100 Ethernet |
| TKP-5500 | 50 mA | 2.40 W | 65 mA | 3.12 W | 75 mA | 3.60 W | 10/100 Ethernet |
| TKP-5600 | 45 mA | 2.16 W | 69 mA | 3.31 W | 104 mA | 4.99 W | 10/100 Ethernet |
| TKP-7600 | 55 mA | 2.64 W | 75 mA | 3.60 W | 120 mA | 5.76 W | 10/100 Ethernet |
| TKP-8600 | 80 mA | 3.84 W | 120 mA | 5.76 W | 165 mA | 7.90 W | 10/100/1000 Gigabit Ethernet |
| TKP-9600 | 50 mA | 2.40 W | 140 mA | 6.72 W | 320 mA | 15.36 W | 10/100/1000 Gigabit Ethernet |
| TDC-7100 | 3.12 mA | 0.15 W | 63 mA | 3.00 W | 115 mA | 5.50 W | - |
| TDC-9100 | 7.29 mA | 0.35 W | 140 mA | 6.72 W | 130 mA | 6.25 W | - |

| | Current | Watts | Current | Watts | Current | Watts | |
|---|---|---|---|---|---|---|---|
| TRF-ZW10 | - | - | 40 mA | 1.9 W | 50 mA | 2.4 W | 10/100/1000 Gigabit/PoE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DMS-IN | - | - | 25 mA | **1.20 W** | 32 mA | **1.53 W** | 10/100 Ethernet |
| DMS-OUT | - | - | 25 mA | **1.20 W** | 32 mA | **1.53 W** | 10/100 Ethernet |
| | | | | | | | |
| MC-70VC | - | - | - | - | - | **2.70 W** | 10/100 Ethernet |
| MC-73B | - | - | - | - | - | **5.70 W** | 10/100 Ethernet |
| MC-75CD | - | - | - | - | - | **2.30 W** | 10/100 Ethernet |
| CAM-DC-O | - | - | - | - | - | **2.30 W** | 10/100 Ethernet |
| CAM-DC-I | - | - | - | - | - | **2.30 W** | 10/100 Ethernet |
| CAM-MC | - | - | - | - | - | **1.90 W** | 10/100 Ethernet |
| | | | | | | | |
| HDA-130 (**PoE++** or AC Adapter Powered) | - | - | - | - | **1.25 A | **60.0 W** | Gigabit Ethernet (1000Mbps)/PoE, Powered by 48 VDC AC adapter or **PoE++** injector. **The HDA-130 can draw up to 1.25A based on how it is being powered. If you are powering the amp with **PoE++** then the draw can be up to 1.25A. |
| HDA-130 (**PoE+** Powered) | - | - | - | - | ***0.52 A | **24.96 W** | ***If you are powering the amp with **PoE+** then you basically slash the current draw in half and the amp draws .52A. The current draw is based on what power source you are using for the amplifier. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HDA-I/O | - | - | - | - | 0.50 A | **7.0 W** | Gigabit Ethernet (1000Mbps), Powered by 12 VDC AC adapter or Power Over Ethernet injector |
| HDA-4100 | - | - | - | - | - | **75 Watts** | 120 V only. No PoE option. Gigabit Ethernet |
| HDA-8100 | - | - | - | - | - | **120 Watts** | 120 V only. No PoE option. Gigabit Ethernet |
| HDA-1600 | - | - | - | - | - | **95 Watts** | 120 V only. No PoE option. Gigabit Ethernet |

**Additional Note for the HDA-130 Amplifier:**
Current draw for amplifiers is slightly different than current draw for touch screens since the amplifier draws more current the harder it is working. Touch screens typically have two states - on or off - meaning it is drawing more current when it is on, and very little when the screen is off. Amplifier current draw can be up and down based on the size of its power supply caps, how loud the source is playing, etc.

**URC MFS-POE8:**
Power Supply: 48V External Power Supply
PoE: 8 Ports (6.2Wx8=50W, 1 Port Max-15.4W)

**URC POE-1:**
Power Supply: 48 volts @ .5 Amps (internal, built-in, all in one unit)
PoE Power Rating: 1 Port @ .5 Amps for a total of 24 Watts

Note:
mA = The abbreviation **"mA"** denotes the International System unit for electrical current known as the milliampere. One milliampere is equal to one-thousandth of an ampere.

W = The abbreviation **"W"** denotes the International System unit for electrical power known as the Watt. The Watt is the electrical unit of electric power. It measures the rate of consumed energy.

V = The abbreviation **"V"** denotes the International System unit for electrical power known as the Volt. Volt is the electrical unit of Voltage.

A = Ampere, often shortened to amp **"A"**, is the base unit of electric current in the International System of Units.

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**Additional Information & Resources:**

A good resource for learning more about PoE ratings and detailed information on Type 1 through Type 4 PoE can be found here.

A PoE++ injector that we have tested with the HDA-130 amplifier that delivers full PoE++ power and is very dependable can be found here.

Please refer to this article for additional information on URC devices power consumption and thermal properties (BTU/hr).

To learn more about HDA products and programming, please see the HDA Programmers Guide or the Accelerator 3 online **Programming Guide**.

To learn more about Accelerator 3 configuration and programming, please see the Accelerator 3 online **Programming Guide**.