

Grandstream Networks, Inc.

GWN77xx Power - Consumption guide



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This document is a technical bulletin describing power consumption for GWN77xx unmanaged network switches under idle, 100% traffic, and maximum-load conditions. Values vary according to the model and power input.

AC Power Consumption

The following table lists the maximum AC input power measured at 220 V AC.

Model	AC Input Power (220 V AC)
GWN7700	2.65 W
GWN7701	3.82 W
GWN7702	8.28 W
GWN7703	12.30 W
GWN7700P	66.62 W
GWN7701P	67.98 W
GWN7701PA	156.9 W
GWN7702P	161.2 W
GWN7700M	6.23 W
GWN7701M	9.53 W
GWN7706	29 W
GWN7721	10.8 W
GWN7721P	147 W
GWN7711	3.8 W
GWN7711P	65 W
GWN7721PE	156 W

DC Power Consumption

The following tables list measured DC input power by input voltage. Power Consumption (100% Traffic) is the power used while all network interfaces carry traffic at full load. For PoE-capable models, Maximum Power is measured with 100% traffic and all PoE outputs operating at full load.

5 V DC Input

Model	Idle (No Devices Connected)	Power Consumption (100% Traffic)
GWN7700	0.7187 W	1.750 W
GWN7701	0.4375 W	2.750 W
GWN7711	1.31 W	2.8 W

12 V DC Input

Model	Idle (No Devices Connected)	Power Consumption (100% Traffic)
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GWN7700M	1.125 W	5.25 W
GWN7701M	1.5 W	8.25 W
GWN7702	2.25 W	6.625 W
GWN7703	3.031 W	11.09 W
GWN7706	8.437 W	25.62 W
GWN7721	1.05 W	9.1 W

54 V DC Input

Model	Idle (No Devices Connected)	Power Consumption (100% Traffic)	Maximum Power (100% Traffic + All PoE)
GWN7700P	1.812 W	2.625 W	62.625 W
GWN7701P	1.312 W	3.906 W	63.906 W
GWN7701PA	2 W	4.687 W	151.6 W
GWN7702P	4 W	9.062 W	154.7 W
GWN7700MP	1.48 W	5.60 W	62.52 W
GWN7721P	2.5 W	10.6 W	137 W
GWN7711P	1.8 W	3.8 W	60 W
GWN7721PE	2.7 W	10.2 W	141 W

48 V DC Input

Model	Idle (No Devices Connected)	Power Consumption (100% Traffic)	Maximum Power (100% Traffic + All PoE)
GWN7710R	3.90 W	5.60 W	101 W

PoE++ Power Consumption

The following table lists the power consumed by the GWN7710R through its PoE++ input. Power Consumption (100% Traffic) is measured with all network interfaces carrying traffic at full load. Maximum Power is measured with 100% traffic and all PoE outputs operating at full load.

Model	Idle (No Devices Connected)	Power Consumption (100% Traffic)	Maximum Power (100% Traffic + All PoE)
GWN7710R	4.70 W	6.0 W	66 W

Test Conditions

All power consumption values were measured under controlled laboratory conditions and are provided as estimates.

- **Idle:** The switch completed the boot process with no devices connected to any network port.
- **100% traffic:** Power consumption was measured while all network interfaces carried traffic at full load.
- **Maximum power:** Power consumption was measured with 100% traffic on all network interfaces and all PSE output ports operating at full load.

For the GWN7711P maximum-power test, the DC input was 53.5 V at 1.22 A, and the PSE output power was

55 W.

For the GWN7710R maximum-power test with a 48 V DC input, the DC input was 48 V at 3 A, and the PSE output power was 95 W.

For the GWN7710R PoE++ maximum-power test, a Class 6 PoE++ switch powered the GWN7710R, and the maximum PSE output power was 59 W.