

1106 EEM AC Power Module

Features

- Front panel IEC inlet
- 80-264V input range
- Five 4-pin Molex MiniFit outputs
- EMC filter

Applications

- Power supply for ARTIQ/Sinara systems
- Provides 400W at 25CFM cooling, 200W with free air convection

General Description

The 1106 EEM AC Power Module is a 8hp EEM form factor module, part of the ARTIQ/Sinara family. It serves as an in-crate power supply to other Sinara cards such as 1124 Carrier Kasli 2.0 and 1125 Carrier Kasli-SoC.

The AC Power Module features universal IEC input in the front panel and five 4-pin Molex output, directly compatible with Kasli Carriers, at the very rear side of the module. The mains circuit is protected by a steel cover.



Figure 1: EEM AC Power Module with handle

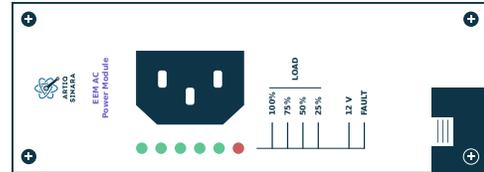


Figure 2: EEM AC Power Module front panel

Source

1106 EEM AC Power Module, like all the Sinara hardware family, is open-source hardware, and design files (schematics, PCB layouts, BOMs) can be found in detail at the repository https://github.com/sinara-hw/EEM_PWR_MOD_AC.

Electrical Specifications

Specifications of parameters are based on the datasheet of the EPP-400-12 power supply¹.

Table 1: Electrical Specifications

Parameter	Min	Typ.	Max	Unit	Conditions
Output voltage		12		V	
Rated current		33.3		A	25CFM forced cooling Convection
		20.8			
Rated power		399.6		W	25CFM forced cooling Convection
		249.6			
Input voltage	80		264	VAC	
Input frequency range	47		63	Hz	

Indicator LEDs

The 1106 EEM AC Power Module features several indicator LEDs. Four serve as current indicators signaling 25%, 50%, 75% and 100% load. 12V LED signals power on. Additional OVERTEMP LED signals overtemp or overload.

Ordering Information

To order, please visit <https://m-labs.hk> and choose 1106 EEM AC Power Module in the ARTIQ/Sinara hardware selection tool. Cards can be ordered as part of a fully-featured ARTIQ/Sinara crate or standalone through the 'Spare cards' option. Otherwise, orders can also be made by writing directly to <mailto:sales@m-labs.hk>.

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¹<https://www.meanwell.com/upload/pdf/EPP-400/EPP-400-SPEC.PDF>