



- 1U High
- Up to 10kW in 19" Rack
- Hot Swap Capable
- High Efficiency

TH Series

1200W to 2500W

Front End Power Supplies

Key Market Segments & Applications

Power for distributed Power Architecture
 Factory Automation

TH Features and Benefits

Features

- 1U High
- HotSwap Capable
- High efficiency
- Full array of signals

Benefits

- Utilises less cabinet space
- Suitable for N+1 redundancy
- Higher Density
- Easier System Monitoring

Specifications

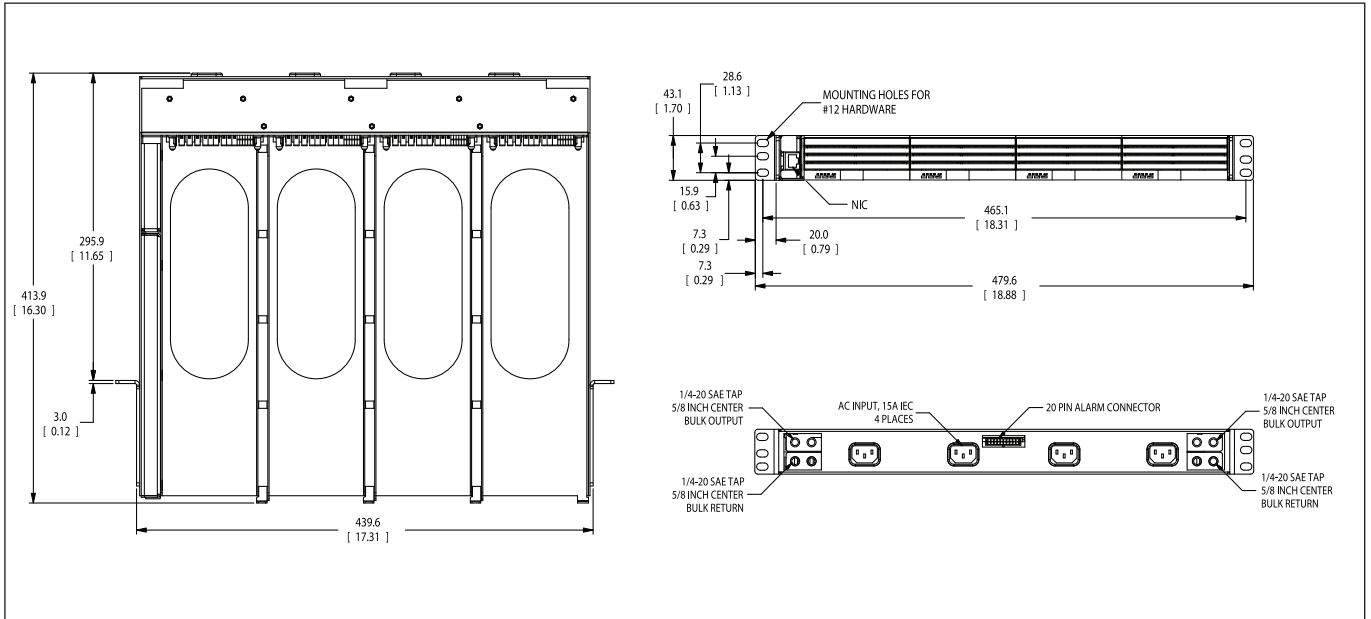
| ITEMS | MODEL | TH120012(5) | TH120024 | TH120048 | TH250048 (5) |
|------------------------------|--------|---|-------------|-------------|--------------|
| | | 12V Nominal | 24V Nominal | 48V Nominal | |
| Output Voltage Range | VDC | 10.5-14 | 21-28 | 42-56 | 42-56 |
| Total Regulation | % | | | ±1% | |
| Output Current | A(max) | 100 | 50 | 25 | 50 |
| Current limit (1) | A | 120 | 60 | 30 | 60 |
| Short Circuit Current | % | 150 | 75 | 37 | 75 |
| Output Noise | mV | 250mV peak to peak (10kHz to 20MHz) | | | |
| Output Rise Time | ms | 100-400 ms | | | |
| Dynamic Response | % | 3% in 10ms for a 10-100% load change | | | |
| Overvoltage Protection (1) | VDC | 13-15 | 27-30 | 50-60 | 50-60 |
| Load Sharing | % | ±5% | | | |
| I2C Programming | - | Set output Volt, Monitors AC present, Converter OK, Thermal Profile, Fan fail | | | |
| Signals (opto isolated) (4) | - | AC Fail, Module Alarm, Temp Alarm | | | |
| Remote On/Off | V | Shuts down outputs by applying 3.3 to 5V | | | |
| Auxiliary Outputs (3) | - | 12V@100mA | | | |
| AC Input | VAC | 90-264 | 90-264 | 90-264 | 180-264 |
| Input Frequency | Hz | 47-63 | | | |
| Power Factor | - | 0.99 typ. @ 230VAC, full load, meets EN61000-3-2 | | | |
| Inrush Current (2) | A | 30 amps peak | | | |
| Efficiency (at full load) | % | 86 | 90 | 92 | 93 |
| Immunity | - | EN61000-4-2,-3,-4,-5,-6,-8,-11 | | | |
| EMC (conducted and radiated) | - | EN55022, Level B, FCC Class B | | | |
| Operating Temperature | °C | -40 to 70, derate linearly to 60% load above 50°C | | | |
| Storage Temperature | °C | -40 to 85 | | | |
| Humidity | % | 5 to 95 (non-condensing) | | | |
| Altitude | ft | -200 to 8000 | | | |
| Shock | G | IEC68-2-27, Mil-STD-810E, 20G | | | |
| Vibration | Hz | IEC68-2-64 (random) 20-2000Hz, 30 minutes | | | |
| Safety Agency | | UL60950-1, CSA 22.2 No. 60950-00, EN60950-1, CE Mark | | | |
| Size (L x W x H) | mm | 362 x 102 x 43 (stand alone), 414 x 440 x 43 (THR4 Rack) | | | |
| Weight | Kg | Stand alone unit 2.7kg, Rack 4.05kg | | | |
| Warranty | - | 2 Years | | | |

1. Adjustable via 1°C or through Lambda Network Interface Card 2. Excludes Xcaps in the EMC input filter 3. Operates independent of main DC output and is referenced to (-)Vout
 4. All three signals share a common return - logic ground 5. Use Rack Model THR400

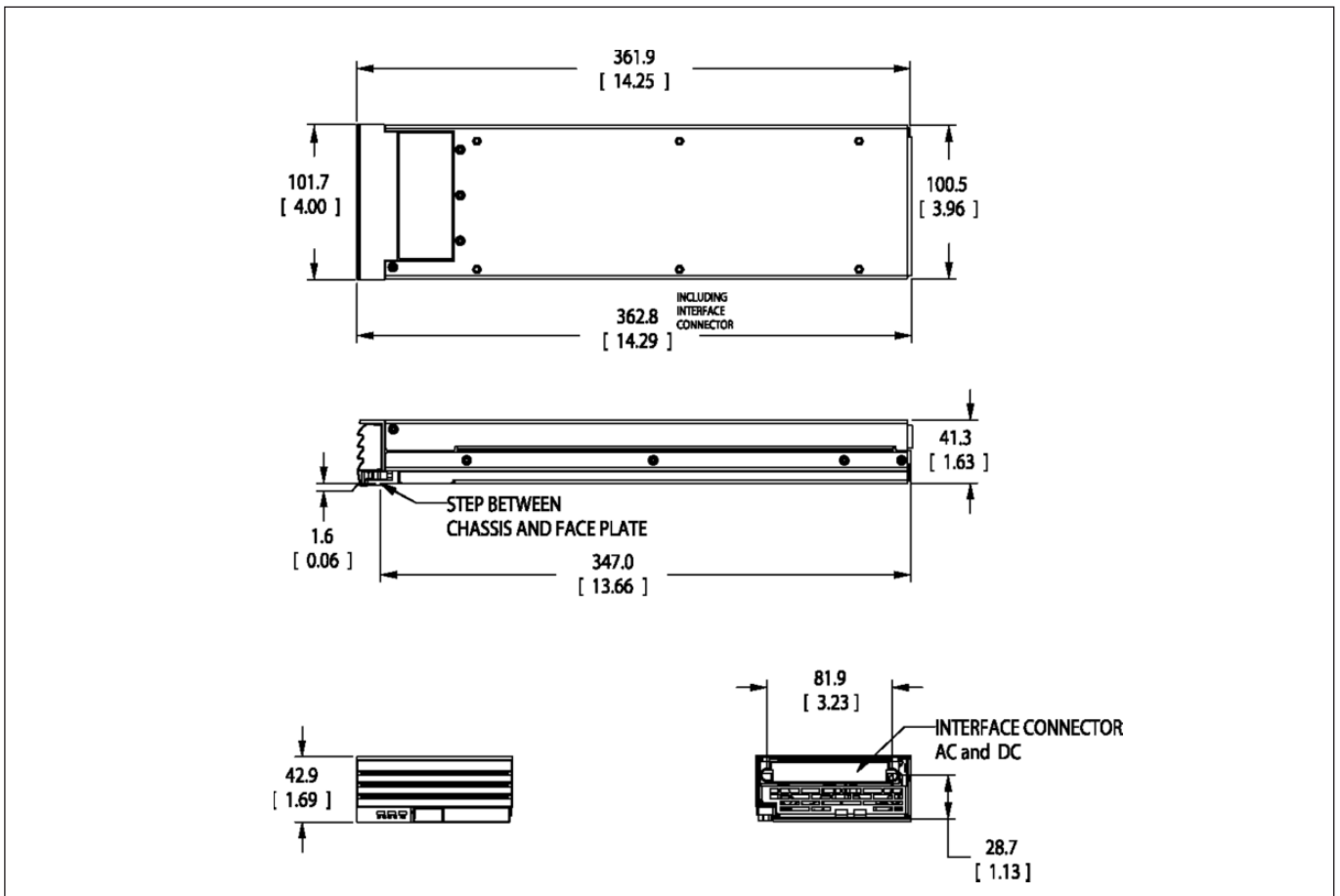
| Model Selector | | | |
|-----------------------|---|-----------------------|----------------------|
| Model | Output Voltage | Output Current | Maximum Power |
| TH120012 (5) | 12V | 100A | 1200W |
| TH120024 | 24V | 50A | 1250W |
| TH120048 | 48V | 25A | 1250W |
| TH250048 (5) | 48V | 50A | 2500W |
| THR4 | 19" Rack holds up to 4 TH Modules. 200A Max. output current | | |
| THR400 | 19" Rack for 400A output holds up to 4 TH Modules. | | |
| | Screw terminal mains input connection | | |
| THRBP | Blanking panel for one module slot | | |
| THR4NIC | Network interface card for 48V systems | | |
| THR4NIC12 | Network interface card for 12V systems | | |
| THR4NIC24 | Network interface card for 24V systems | | |
| TLCK232 | RS232 Communications Kit | | |
| TLRC01 | Signal Cable | | |

| Alarm Connector | | |
|------------------------|----------------|------------|
| Mating Housing | Molex Microfit | 43025-2000 |
| Mating Terminal | Molex Microfit | 43030-0002 |

Outline Drawing TH Rack



Outline Drawing TH Series



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