ProMik

PSU2048
Multi-channel Power Supply with adjustable voltage and power

PSU2048 rack version

PSU Manager GUI
PSU2048

Overview

48 Volt board nets are becoming constantly more essential for automotive OEM in order to decrease fuel consumption and emissions. As a consequence, an increasing number of electronical applications need to be powered up with 48V. To meet these requirements ProMik developed the PSU2048 representing a modular and scalable tool to supply multiple applications in parallel with up to 50 Volt. The PSU2048 is the perfect power supply unit for different use-cases in electronic board production. It can be used as a stand-alone tool in order to control the power supply for devices under test at any production and test stage or alternatively as an extension of ProMik programmers in order to realize power supply and test features integrated into the flash process.

Key Features

- Modular power supply unit with 4 independent channels
- Multiple PSU2048 modules can be installed in parallel in a ProMik 19” rack to support up to 40 targets per rack
- Standard M12 Connector
- Voltage range 4 – 50 Volt
- Up to 4A current / 50 Watts per output
- Independent control of each channel
- Controllable via Ethernet
- Programmable inrush current limit and inrush current timeout
- Individually configurable over-current limit
- Load current monitoring, reads current continuously or periodically
- Overload- / overvoltage protection
- Backdrive output protection
- Short-circuit load protection
- Reversed input protection
- Discharge option for DUT capacitors after switching off
- Sleep mode with minimal power consumption

Software Features

ProMik’s PSU Manager represents an excellent software package which is available for the PSU2048. It allows the user to easily control settings and monitor the power supply process. With its intuitive graphical user interface several features and parameters are quickly adjustable for each channel of the power supply unit.

- Voltage setting in 1mV steps
- Inrush current limit settings
- Each channel individually controllable
- LEDs indicate the channel’s current state
- Sampling of current and voltage values with 1kHz
- Measurement data recording and logging
- Visualization of voltage and current course

Mechanical Dimensions

The following data applies to the PSU2048-R with front panel including the CPU module but without enclosure:
- Size: 160 x 100 x 35mm

The PSU2048-R is a standard 7BU unit for a 19” ProMik Rack.