

SOLID-STATE POWER DISTRIBUTION UNIT

SSPDU-115A-12-135-CXX

The SSPDU-115A-12-135-CXX is a high-power density, low-profile solid-state power distribution unit designed to efficiently manage and distribute input voltages ranging from 60 to 160V_{AC} across 12 independent output channels. SSPDU offers advanced features such as user-configurable I²T protection, programmable overload protection, and controlled voltage rise and fall times to reduce electromagnetic interference and inrush currents. Intelligent zero-cross switching ensures smooth AC transitions and enhances operational reliability.

- 12 Independent Channel Outputs
- Channel Outputs with Rated Current of 7.5A and 15A
- User Adjustable I²T Protection / Thermal Memory
- Controlled Output Voltage Rise Time
- Configurable Three Phase (Wye/Delta) Operation
- Zero-Crossing Switching
- Cooling by Conduction
- Channel Paralleling Option for High Output Currents
- Continuous Built-in Test
- Protection Override (Battle Mode)
- CAN and RS422/RS485 Interface
- Discrete Control Interface
- User Configuration Settings Stored in Internal Memory
- MIL-STD-704F Compliant (115V_{AC} Operation)



VERTE Elektronik's SSPDU-115A-12-135-CXX series is designed as a high-power density, low-profile power distribution unit. This unit, which has 12 channel outputs, distributes the input voltage in the range of 60-160V_{AC} to the loads via semiconductor switches and provides overload and short circuit protection. The device can be controlled and configured via CAN and RS-422/485 communication interfaces, and status information can be displayed.



The SSPDU-115D-12-135-CXX series features 12 independent output channels with user-adjustable I²T protection, thermal memory, and high-capacitance load handling capability. Each output offers controlled voltage rise times to minimize inrush current and electromagnetic interference. The unit supports configurable output ratings, including nominal currents such as 7.5A and 15A, with the option to parallel channels for higher current demands. Intelligent zero-cross switching ensures smooth AC transitions, reducing electrical stress on connected loads and enhancing overall operational reliability. Designed for flexibility, the system also supports configurable three-phase operation in both Wye and Delta configurations. Integrated safety features include emergency shutdown and battle override functionality, with built-in self-monitoring and saved user settings delivering long-term reliability and flexibility.

