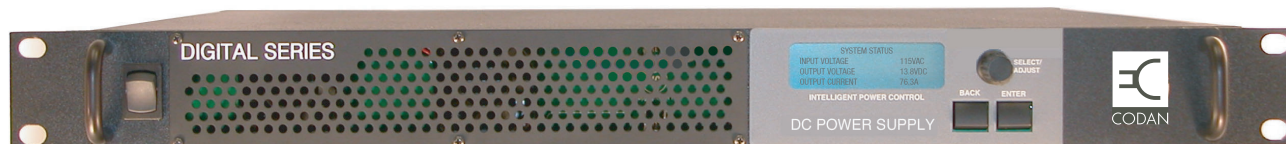


TN836 High Current Digital Series AC to DC Power Supplies

The high current digital series power supplies provide 675 Watts (50 Amps @ +13.8 Vdc) or 1350 Watts (100 Amps @ +13.8 Vdc) of power and are 19" rack mountable in a 1 RU rack mount chassis and include battery backup capability.

The digital series power supply may include the following features:

- Front panel control of voltage, current limiting (optionally password protected).
- TCP/IP Ethernet connector for remote monitoring and control of power supply via a built-in web server.
- Battery backup and Low Voltage Disconnect (LVD) with adjustable setpoints.
- Connect up to 6 power supplies in parallel with load sharing control.
- Form C alarm contacts and remote on/off capability.
- Temperature controlled fans (front to rear airflow).



Specifications

Input Voltage Range	100 to 265 Vac (Automatic)
Frequency Range	50 / 60 Hz
Output Voltage Range	+12 Vdc (+11.5 - +15.5 Vdc)
Continuous Output Current	50 Amps or 100 Amps @ +12 Vdc (+60°C)
Operating Temperature Range	-20°C to +60°C
Typical Efficiency	90% @ 220 Vac
Output Ripple	15mV RMS

Models Available

PSA-12-50-R6-31	50 Amps with Battery Backup and Remote / Alarm Connector (No Front Panel Display / Control and no Ethernet connector).
PSA-12-50-R5-11	50 Amps with Battery Backup, Remote / Alarm Connector, Front Panel Display / Control and Ethernet connector.
PSA-12-50-R5-12	50 Amps with Battery Backup, Remote / Alarm Connector, Front Panel Display / Control (No Ethernet connector).
PSA-12-100-R5-11	100 Amps with Battery Backup, Remote / Alarm Connector, Front Panel Display / Control and Ethernet connector.
PSA-12-100-R5-12	100 Amps with Battery Backup, Remote / Alarm Connector, Front Panel Display / Control (No Ethernet connector).



TN836 High Current Digital Series AC to DC Power Supplies

Installation

1. Mount the unit to the 19" rack.
2. Connect the positive side of the load to the "POS" busbar and the negative side of the load to the "NEG" busbar. Tighten the busbar hardware to properly secure the wires.
3. Connect the backup battery (if applicable) positive side of the load to the "BAT" busbar, and the negative side of the load to the "NEG" busbar. Tighten the busbar hardware to properly secure the wires.
4. Connect a chassis bonding wire to the 1/4 inch ground stud located on the back panel (if required).
5. While the switch is in the OFF position, connect the supplied AC power cord to the AC input socket.
6. Plug the unit into an AC source capable of handling the rated input current.
7. Turn the AC switch (located on the front panel) to the ON position to operate the unit.

Front Panel Control

The Front Panel Display allows the following:

- View Input Voltage and Output Current
- View and Control Output Voltage (+11.5 - +15.5 Vdc) and Current Limit (25 A - 106 A)
- Turn the DC Output On or Off
- Set and Clear a password for the front panel control, including a lockout timer (0 - 60 min.)
- View the IP address, MAC address and device name
- Reset the password, IP address and port to factory default
- Configure parallel mode (Master and Slave setting), number of units paralleled, or set as standalone
- Set the LVD disconnect (+10 - +12.4 Vdc) and reconnect voltage (+10.6 - +13.8 Vdc), and view battery voltage

Battery Backup

The "BAT" terminal provides a current limited charge up to the maximum rated output of the supply. When AC fails, the load is automatically and seamlessly transferred to the battery so that the load is not interrupted. When AC returns, the power supply picks up the load, and resumes charging the battery to an optimal state of charge. A built-in Low Voltage Disconnect (LVD) protects the battery voltage from dropping too low, thereby avoiding damage to the battery.

AC Power Cords

The 50 Amp Power supply requires a NEMA 5-15 (15 Amp) socket for the power cord.
The 100 Amp Power supply requires a NEMA 5-20 (20 Amp) socket for the power cord.

This product has been discontinued and is no longer manufactured by Codan Communications

TN836 High Current Digital Series AC to DC Power Supplies

Remote Control and Alarm Connector

A REMOTE connector on the back panel of the power supply allows for the following functionality:

Pin Number	Pin Description	Functionality
Pin 1	REM SD+	Remote shutdown control lines (TTL compatible)
Pin 2	REM SD-	Hi = output off; Low = output on
Pin 3	REM SNS+	Remote voltage sense lines for tighter voltage regulation at load
Pin 4	REM SNS-	Default sense point is at busbars
Pin 5	Common	Alarm Output Common
Pin 6	NO	Alarm Output Normally Open contact (0.5 A 125 Vac max.)
Pin 7	NC	Alarm Output Normally Closed contact (0.5 A 125 Vac max.)

Alarms

Alarm Output activation setting is enabled or disabled through the TCP/IP web based utility (for units without the Ethernet option the form C relay output will always be activated for an alarm condition). Available alarms are as follows:

DC Output Voltage Failure Alarm	Output voltage rises above $\approx 110\%$ of the maximum rated output. Alarm latches output off, clears when DC output manually re-enabled.
DC Overcurrent Shutdown Alarm	Output current rises above $\approx 115\%$ of the maximum rated output. Alarm latches output off, clears when DC output manually re-enabled.
AC Input Voltage Failure Alarm	AC Input voltage falls below ≈ 90 Vac. Alarm latches output off, automatically clears when AC input rises . above ≈ 100 Vac for 3 seconds.
System Failure Alarm	Internal system failure. Alarm latches output off, clears when DC output manually re-enabled. and internal fault is no longer present.
Over-Temperature Alarm	Internal over-temperature limit exceeded. Alarm latches output off, automatically clears when temperature . returns to normal operating range.
Parallel Unit Offline Alarm	Communication is lost between parallel units. Output state unaffected. No effect if parallel operation is not active.

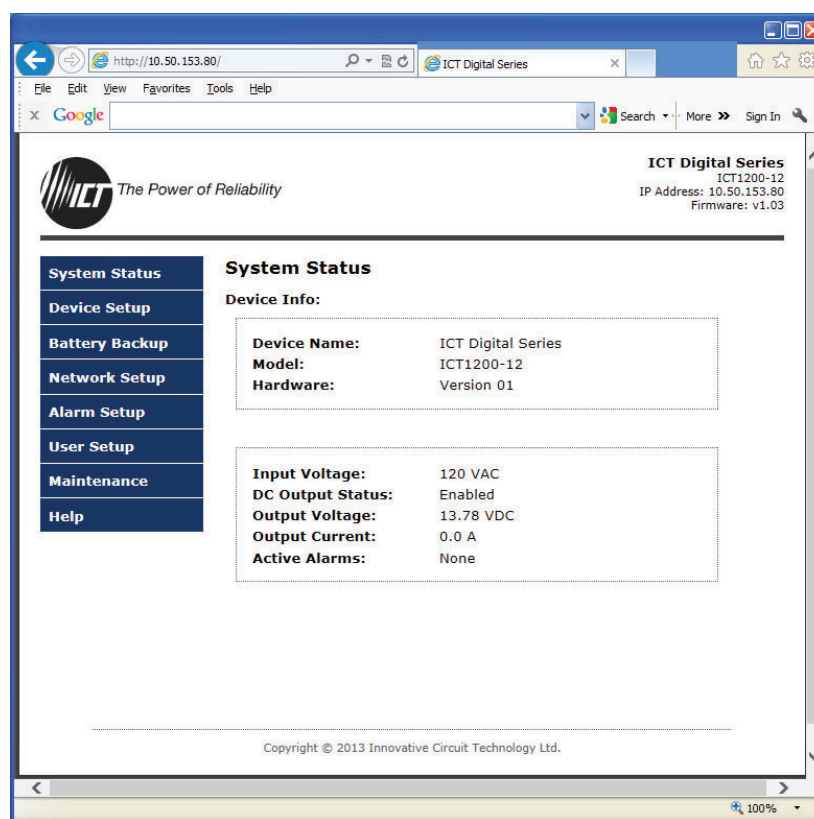
TN836 High Current Digital Series AC to DC Power Supplies

TCP / IP Web Based Utility

The power supplies may be equipped with an embedded Web server that allows status monitoring and changing of the settings and configuration of the power supply. The embedded Web server provides an interface to the power supply that can be accessed through a standard web browser on a network connected computer. There is no additional software to install or configure. If the power supply is connected to a network with a DHCP server, it will be assigned an IP address automatically.

The web browser connection allows all of the configuration of the front panel (voltage control, current limiting, monitoring, password control, IP management parallel mode control and LVD setting), as well as Alarm Setup (independently selecting the alarms to activate the Form C relays and/or send e-mails).

The web browser also has remote reset capability, e-mail configuration, SNMP and other features. An example of the web browser is shown below.



This product has been discontinued and is no longer manufactured by Codan Communications