

DIGITAL SERIES 1RU DC Power Supplies With Digital Control



12V	100A
	50A
24V	50A
	25A
48V	25A
	12.5A

IEL Digital Series DC power supplies bring a new level of performance, functionality, and management to the DC power market. The 1RU Digital Series provides 675 or 1350 watts of power and is available with 12, 24 or 48VDC output. It provides an ideal DC power solution for wireless communications professionals who demand high efficiency and space-saving DC power systems for LMR, broadband, and network communications equipment including radios, repeaters, trunking systems, paging systems, RF amplifiers, microwave, WiMax, routers, bridges, multiplexers, and VOIP. The Digital Series is also ideal for industrial power applications including security systems, transportation, process control, DC in-building power, and automated test systems.

- ▶ 675 or 1350 watts of output power in a 1RU rack mount chassis with 90 to 93% efficiency over a broad power range.
- ▶ Wide-ranging power factor corrected AC input saves energy.
- ▶ Output voltage and current limit can be easily and accurately adjusted using the Intelligent Power Control interface on the password-protected front panel.
- ▶ Optional factory-installed TCP/IP Ethernet option provides complete and easy-to-use remote monitoring and control of the power supply using its built-in web server.
- ▶ Optional factory-installed battery backup and LVD with adjustable disconnect and reconnect voltage setpoints.
- ▶ Up to six Digital Series power supplies can be connected quickly and easily using the IEL Smart Parallel function to provide up to 8kW of output power.

The IEL Digital Series is designed, manufactured and supported in North America to provide the most reliable, flexible, innovative DC power solution available today for wireless communications, broadband and other demanding DC power applications.

Innovation

- ▶ Fast, accurate digital control of output voltage and current limit from the password protected front panel
- ▶ Remote management option using TCP/IP and built-in web server allows remote monitoring, firmware upgrades, password protected control of DC outputs, output voltage and current limit settings
- ▶ Battery backup option provides adjustable LVD disconnect and reconnect setpoints from the front panel or remotely with the TCP/IP option

High Reliability

- ▶ Developed and manufactured by IEL
- ▶ Designed around the highest quality components available
- ▶ Every system is fully tested and burned-in at the factory
- ▶ Output bus bars allow safe and solid DC connections
- ▶ Designed to CSA, FCC Class B

Flexibility

- ▶ Configure To Order (CTO) as base model or with any combination of Battery Backup/LVD and TCP/IP remote management options to suit your installation requirements
- ▶ Form C alarm contacts and remote on/off are standard
- ▶ Can operate as a DC power supply for running loads or for dedicated battery charging
- ▶ Units can be added in parallel to grow system power as site requirements increase

Performance

- ▶ 675 or 1350 watts of output power for demanding applications
- ▶ 90 to 93% efficiency
- ▶ Power factor corrected AC input voltage range of 100-265VAC
- ▶ -20C to +60C operating temperature range
- ▶ Up to six Digital Series power supplies can be paralleled with Smart Parallel Operation for up to 8kW of power

Power Specifications

Continuous Output Current - 12V	100A, 50A
Continuous Output Current - 24V	50A, 25A
Continuous Output Current - 48V	25A, 12.5A
Efficiency (typical) - 12V	90% @ 220VAC
Efficiency (typical) - 24V	91% @ 220VAC
Efficiency (typical) - 48V	93% @ 220VAC
Output Voltage Range - 12V	11.5 - 15.5VDC
Output Voltage Range - 24V	23.0 - 30.0VDC
Output Voltage Range - 48V	46.0 - 60.0VDC
Input Voltage Range	100-265VAC
Frequency Range	50/60Hz
Power Factor (typical)	0.99
Output Ripple - 12V	30mV RMS
Output Ripple - 24V	30mV RMS
Output Ripple - 48V	60mV RMS
Line Regulation	0.1%
Load Regulation	0.5%

Environment

Operating Temperature Range	-20°C to +60°C
Temperature Controlled Fans (front to rear airflow)	

Options

Battery Backup	Factory installed third terminal output for float charging batteries. Provides automatic revert function. Includes low voltage disconnect with user definable disconnect and reconnect voltage setpoints. Intended for single power supply installations with negative ground only. (Consult factory for positive ground applications.)
TCP/IP Interface	Factory installed RJ45 Ethernet port with built-in web server and intuitive graphical user interface. Allows remote monitoring of power supply conditions. Remote management features include turning DC outputs off and on, adjusting output voltage and current-limit settings, and configuring Email alarm alerts. Interface is password protected.
Jumper Cable	Allows Smart Parallel Operation with automatic load sharing when two or more (max. 6) Digital Series power supplies are paralleled together. (Every pair of units requires a jumper cable. Feature requires TCP/IP option to be installed.) Part no. IEICT-JMP
Bus Bar Straps	Allows easy connection of output bus bars when installing two or more Digital Series in parallel. (One set for every two power supplies required.) Part no. IEICT-PAR

Ordering Information - All models are Configured To Order (CTO) at the factory. Options must be selected at time of ordering (except IEICT-JMP and IEICT-PAR)

DESCRIPTION	POWER	12VDC Output	24VDC Output	48VDC Output
Digital Series Power Supply, no options installed.	1350W	IEICT1200-12S	IEICT1200-24S	IEICT1200-48S
	675W	IEICT600-12S	IEICT600-24S	IEICT600-48S
Power supply with factory-installed battery backup terminal, automatic revert and low voltage disconnect with adjustable setpoints.	1350W	IEICT1200-12SB	IEICT1200-24SB	IEICT1200-48SB
	675W	IEICT600-12SB	IEICT600-24SB	IEICT600-48SB
Power supply with factory-installed TCP/IP Ethernet communications port for remote monitoring and control with built-in web server.	1350W	IEICT1200-12SC	IEICT1200-24SC	IEICT1200-48SC
	675W	IEICT600-12SC	IEICT600-24SC	IEICT600-48SC
Power supply with factory-installed battery backup and TCP/IP Ethernet options.	1350W	IEICT1200-12SBC	IEICT1200-24SBC	IEICT1200-48SBC
	675W	IEICT600-12SBC	IEICT600-24SBC	IEICT600-48SBC

Mechanical

Form Factor	1RU - 19", adjustable mounting
Dimensions (inches) L x W x H	16.5 x 19.0 x 1.72
Weight (lbs/kg)	17 lbs / 7.7 kg
AC Input Connectors	Terminal Block, #8 - #16 AWG
DC Output Connectors	Busbars with 3/8" Nuts & Washers
Remote Alarm Connectors	Terminal Block (#16 to #24 AWG)

Standards

CSA22.2 No. 60950-1, FCC Class B

Protection Features

Over-temperature, over-current shutdown, input and output over-voltage, current limit @ 105%

Warranty

Two years

Intelligent Control Features - Front Panel

DISPLAY READINGS	ADJUSTMENTS AVAILABLE
AC input voltage	Set/enter password
DC output voltage	Turn DC outputs on and off
Output current	Adjust DC output voltage
Alarms status	Adjust output current limit
Parallel status ^(a)	Adjust LVD disconnect and reconnect voltage set points ^(b)

(a) when configured for Smart Parallel Operation

(b) with Battery Backup/LVD option installed