

# INTELLICHARGE SERIES

# DC Power Supply with 3-Stage Battery Charger and Integrated LVD 12, 24 and 48 Volt DC Models

The ICT IntelliCharge Series is a high efficiency, power factor corrected DC power supply with battery charger nad LVD that brings sophisticated features into a compact design.

- Operates as a DC UPS, providing uninterrupted DC power to critical loads, even when AC mains fail.
- Wide-ranging power factor corrected AC input helps reduce energy costs and works anywhere in the world.
- Intelligent three-stage charging recharges battery quickly and maintains it in optimal condition.
- 12 and 24 volt DC models with 180 or 360 watts of power output and 360 watt 48 volt DC model
- ▶ Independent battery backup charging terminals with integrated Low Voltage Disconnect.
- ▶ User selectable battery type sets charge cycle transitions for use with standard Flooded, AGM and Gel lead-acid batteries.
- User definable bulk charge current setting.
- Form C alarm contacts provide remote signal of fault conditions.
- ▶ Temperature-compensated charging with optional battery temperature sensor.
- ▶ Compact design allows for mounting one or two units in an optional 1RU Rack Mount Tray.
- Doptional high resolution OLED display provides real time information on current, voltage and charge status.

The ICT IntelliCharge Series design allows the battery charge to be regulated independently from the DC outputs, meaning that the battery will always receive the optimal charging current without the load being affected. Intelligent 3-stage charging will bring a battery back to a full state of charge much faster than trickle or float charging can.

#### **High Reliability**

- Developed and manufactured in North America by ICT
- Designed with the highest quality components available
- Form C contacts provide remote alarm monitoring
- 2 year warranty

# Performance & Flexibility

- 12, 24 and 48 volt DC models available
- ▶ 90 to 93% efficiency at 230VAC input
- Power factor corrected AC input voltage range of 100-265VAC
- → -30C to +60C operating temperature range
- Form C alarm contacts
- Intelligent 3-stage battery charging with integrated LVD
- Operates as a DC power supply for running loads while providing optimal battery charging
- Automatically switches load to battery source when AC fails to provide uninterrupted DC power to the load

#### Innovative Design

- Ultra-quiet operation meets FCC Class B
- High efficiency design saves energy costs
- Intelligent 3-stage charging restores battery faster after AC power outage, and prolongs battery life
- Temperature compensated charging ensures batteries are charged to full capacity in cold environments and protected from over-charging in hot environments



(Shown with optional OLED display)



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## **Power Specifications**

| •                                      |              |
|--|--------------|
| Continuous Output Current - 12V        | 15A, 30A     |
| Continuous Output Current - 24V        | 7.5A, 15A    |
| Continuous Output Current - 48V        | 7.5A         |
| Efficiency (typical) - 12V             | 90% @ 220VAC |
| Efficiency (typical) - 24V             | 91% @ 220VAC |
| Efficiency (typical) - 48V             | 93% @ 220VAC |
| Default Output Float Voltage - 12V (a) | 13.65VDC     |
| Default Output Float Voltage - 24V     | 27.3VDC      |
| Default Output Float Voltage - 48V     | 54.6VDC      |
| Input Voltage Range                    | 100-265VAC   |
| Frequency Range                        | 50/60Hz      |
| Power Factor (typical)                 | 0.99         |
| Output Ripple - all models             | < 50mV RMS   |
| LVD Disconnect Voltage - 12V           | 11.0VDC      |
| LVD Disconnect Voltage - 24V           | 22.0VDC      |
| LVD Disconnect Voltage - 48V           | 44.0VDC      |
| LVD Reconnect Voltage - 12V            | 12.5VDC      |
| LVD Reconnect Voltage - 24V            | 25.0VDC      |
| LVD Reconnect Voltage - 48V            | 50.0VDC      |
|  |              |

#### Mechanical

| Dimensions L x W x H (inches/mm) | 7.9 x 5.9 x 1.8 / 200 x 149 x 46          |
|----------------------------------|---|
| Weight (lbs/kg)                  | 2.61 / 1.19                               |
| AC Input Connectors              | IEC 320-C14                               |
| DC Output Connectors             | 4 position terminal block                 |
| Remote Alarm Connectors          | 5 position pluggable wire clamp connector |

#### **Environment**

| Operating Temperature Range | -30°C to +60°C<br>Derate 2%/ C > 50 C |  |
|-----------------------------|---------------------------------------|--|
|-----------------------------|---------------------------------------|--|

#### **Standards**

CSA22.2 No. 60950-1, FCC part 15 Class B, RCM, CE, RoHS

#### **Protection Features**

Over-temperature, over-voltage, input under-voltage, constant current limit with foldback

#### Warranty

Two years

# **Options**

| Remote Battery<br>Temperature Sensor | 2 wire remote temperature sensor wih 10 ft (3m) cable and mounting clip. Will enable charge voltage thresholds to be automatically compensated according the measured battery case temperature. |
|--------------------------------------|---|
| Digital Meter                        | Optional OLED digital display provides voltage, current and charging status. Must be specified at time of ordering.   |
| 19" Rack Mount Tray                  | Allows one or two IntelliCharge power supplies to be mounted in a 1RU 19" rack.   |

### **Ordering Information**

| DESCRIPTION   | 12VDC Output    | 24VDC Output      | 48VDC Output   |
|---|-----------------|-------------------|----------------|
| IntelliCharge Series Power Supply/Battery Charger, 180 Watts Output Power   | ICT24012-15BC2  | ICT24024-7BC2     |                |
| IntelliCharge Series Power Supply/Battery Charger, 180 Watts, Digital Meter | ICT24012-15BC2M | ICT24024-7BC2M    |                |
| IntelliCharge Series Power Supply/Battery Charger, 360 Watts Output Power   | ICT24012-30BC2  | ICT24024-15BC2    | ICT24048-7BC2  |
| IntelliCharge Series Power Supply/Battery Charger, 360 Watts, Digital Meter | ICT24012-30BC2M | ICT24024-15BC2M   | ICT24048-7BC2M |
| Remote Battery Temperature Sensor   | <del></del>     | ICT-TMP           | <b>→</b>       |
| 19 " Rack Mount Tray (holds 1 or 2 IntelliCharge units)                     | *               | ICT-RM1U / RM2U — | ->             |

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<sup>(</sup>a) Factory default set for flooded. User adjustable for AGM or gel.