

# LOW VOLT DISCONNECT

1U 100/200A Intelligent LVD for 12, 24 or 48VDC Systems



## Description

The ICT200–LVD Low Voltage Disconnect is designed to protect batteries from damage from over–discharging. It features a wide voltage operating range that allows it to be used in 12, 24 or 48VDC site installations, with either positive or negative grounds. It is capable of disconnecting 200 amps at 12 or 24 volts DC, or 100 amps at 48 volts DC (nominal). The ICT Low Voltage Disconnect features an ICT Intelligent Power Control front panel LCD display with a rotary encoder selector and ENTER button to allow easy, accurate setting of disconnect and reconnect voltage setpoints.

The home screen of the display shows battery voltage and current, as well as the LVD device status. The settings screens show low voltage warning, disconnect threshold, reconnect point, and manual disconnect/reconnect settings. An Alarm screen will show Low Voltage Warning or Disconnect status. There is an optional password protection level on the interface that a user can select if desired. There is an over–ride feature that allows a user to manually open or close the LVD contactor.

The rear panel contains a 5 position connector for battery +/- sense connections, and Form C alarm relay contacts. An alarm will be sent when a low voltage disconnect or over–current event occurs.

## Performance

The ICT Low Voltage Disconnect can be used in 12 and 24 volt DC applications to disconnect 200 amps of current, or in 48VDC applications to disconnect 100 amps of current. The rugged design and intelligent monitoring and control bring a new level of performance to site managers and users.

The ICT Low Voltage Disconnect adds to the ICT line of Intelligent DC power solutions by providing users with more power control.

The front panel display provides readings for voltage, current, device status and alarms, and the Intelligent Power Control interface allows users to quickly and easily adjust the voltage disconnect and reconnect setpoints. Password protection is provided for an extra level of security if the installation is at a shared site.

## Reliability

Like all ICT DC power products, the ICT Low Voltage Disconnect is designed and manufactured in North America. Reliability is achieved through careful design, thorough qualification of every component used, and extensive verification testing.

The operating temperature range is –20C to +60C. The Warranty is three years.

## Flexibility

The wide–ranging voltage design means that a single ICT Low Voltage Disconnect can be used whether your site is 12, 24 or 48 volts DC. The 1RU design saves valuable rack space, and the mounting position is adjustable.

The rear mounted bus bars allow easy integration with power supplies, DC distribution panels, and other system components.

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## Power Specifications

Continuous Current Rating - 12V or 24V	200A
Continuous Output Rating - 48V	100A
Operating Voltage Range	10-65VDC
LVD Transition Delay	3 secs.
Over-Current Disconnect	110% for 10 secs.
Operating Ground	POS or NEG

## Mechanical

Form Factor	1RU - 19", adjustable mounting pos.
Dimensions (inches) L x W x H	8.75 x 19.0 x 1.72
Weight (lbs)	9.5
DC Output Connectors	Busbars with 1/4" bolts
Remote Alarm Connectors	Terminal Block (#16 to #24 AWG)

## Standards

Designed to UL1950

## Intelligent Control Features - Front Panels

DISPLAY READINGS	ADJUSTMENTS AVAILABLE
System voltage	Set/enter password
System Current	Select System Voltage
Low Voltage Warning	Adjust Disconnect Setpoint
Over Current Warning	Adjust Reconnect Setpoint
Override Status	Manual LVD Open
Device Status	Manual LVD Close

## LVD Operation - Adjustment Ranges

Disconnect Voltage 12V	10.5 - 12.5VDC
Disconnect Voltage 24V	21.0 - 25.0VDC
Disconnect Voltage 48V	42.0 - 50.0VDC
Reconnect Voltage 12V	12.0 - 13.8VDC
Reconnect Voltage 24V	24.0 - 27.6VDC
Reconnect Voltage 48V	48.0 - 55.2VDC

## Remote Alarms

Low voltage disconnect, over-current, over-temp

## Warranty

Three years

## Model Information

MODEL NAME	Model Number	RATING	DESCRIPTION
ICT Low Voltage Disconnect	ICT200-LVD	200 Amps at 12 or 24VDC (nominal) 100 amps at 48VDC (nominal)	1RU Low Voltage Disconnect with Intelligent Control Display, adjustable disconnect and reconnect setpoints, remote alarm contacts.

## Outline Drawings

