



ISOLATED SERIES 2

Isolated DC-DC Converters

ICT ISOLATED SERIES 2 DC-DC converters feature an all new design that builds on the ICT legacy of reliability and performance. This line delivers higher efficiency, an on/off control contact to help save energy and battery life, 3 new high power models, and a 3-year warranty. With all new price points, the ISOLATED SERIES 2 provides an unmatched level of price-performance in the industry.

ISOLATED SERIES 2 converters can operate from a negative or positive ground electrical system, and are ideal for applications where complete isolation is necessary between primary and secondary circuits, as well as from the chassis.



Performance and Flexibility

Models are available from 120 watts to 420 watts, in step up and step down models, to match your needs. Input voltages range from 10 to 60VDC, with outputs in 12, 24 and 48VDC to cover virtually every application requirement.

Low Cost of Ownership

All models come with a 3 year warranty. Minimum internal wiring and conformal coating of the electronics protects these converters from life-shortening vibration and moisture.

Reliability

Reliability is achieved through careful design that virtually eliminates internal wiring and connections that can fail. Wide input voltage ranges are less susceptible to voltage spikes and drops. Every unit is extensively tested before it leaves the factory.

Energy Saving Design

A high-efficiency design means less energy is lost in the conversion process. A contact terminal is provided that allows the converter to be turned off and on by the main circuit, saving energy and avoiding standby drain on the battery.

MODEL SELECTOR GUIDE

Input Voltage	Output Voltage	Output Current	Model Number	
12VDC	12VDC	12 Amps	ICT1212-12AI2	
		35 Amps	ICT1212-35AI2	
	24VDC	5 Amps	10 Amps	ICT1224-5AI2
			20 Amps	ICT1224-10AI2
		48VDC	5 Amps	ICT103048-5AI2
	24VDC	12VDC	12 Amps	ICT206012-12AI2
20 Amps			ICT206012-20AI2	
35 Amps			ICT206012-35AI2	
24VDC		5 Amps	ICT206024-5AI2	
		10 Amps	ICT206024-10AI2	
48VDC		5 Amps	ICT103048-5AI2	
48VDC	12VDC	12 Amps	ICT206012-12AI2	
		20 Amps	ICT206012-20AI2	
		35 Amps	ICT206012-35AI2	
48VDC	24VDC	5 Amps	ICT206024-5AI2	
		10 Amps	ICT206024-10AI2	

TECH NOTE DC converters are used to take the DC voltage from a power source such as a vehicle battery that may be in 24 or 48VDC, and convert it to a different voltage such as 12VDC to power a two-way radio, GPS, surveillance camera or other device. Isolated converters are useful in that they operate in a positive or negative ground environment, and provide isolation from the chassis.





Specifications

Model Number	Input Voltage Range	Output Voltage	Output Current (Cont.)	Output Current (Peak)	Current Limiting	Line Regulation	Load Regulation	Output Ripple (Max)	Efficiency (Typical)	Input Fuse	Operating Temperature Range	Dimensions
ICT1212-12AI2	11–18 VDC	13.8 VDC +/- 150 mV	10.0 Amps	12.0 Amps	12.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	88%	20 Amp	-20C to +40C	Drawing A
ICT1212-35AI2	11–18 VDC	13.8 VDC +/- 150 mV	32.0 Amps	35.0 Amps	35.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	90%	50 Amp	-20C to +40C	Drawing B
ICT1224-5AI2	11–18 VDC	27.6 VDC +/- 300 mV	4.0 Amps	5.0 Amps	5.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	88%	15 Amp	-20C to +40C	Drawing A
ICT1224-10AI2	11–18 VDC	27.6 VDC +/- 300 mV	8.0 Amps	10.0 Amps	10.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	35 Amp	-20C to +40C	Drawing A
ICT1224-20AI2	11–18 VDC	27.6 VDC +/- 300 mV	17.0 Amps	20.0 Amps	20.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	50 Amp	-20C to +40C	Drawing B
ICT103048-5AI2	11–30 VDC	48.0 VDC +/- 300 mV	4.0 Amps	5.0 Amps	5.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	35 Amp	-20C to +40C	Drawing A
ICT206012-12AI2	20–60 VDC	13.8 VDC +/- 150 mV	10.0 Amps	12.0 Amps	12.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	88%	15 Amp	-20C to +40C	Drawing A
ICT206012-20AI2	20–60 VDC	13.8 VDC +/- 150 mV	17.0 Amps	20.0 Amps	20.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	90%	20 Amp	-20C to +40C	Drawing A
ICT206024-5AI2	20–60 VDC	27.6 VDC +/- 300 mV	4.0 Amps	5.0 Amps	5.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	88%	10 Amp	-20C to +40C	Drawing A
ICT206024-10AI2	20–60 VDC	27.6 VDC +/- 300 mV	8.0 Amps	10.0 Amps	10.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	20 Amp	-20C to +40C	Drawing A
ICT206012-35AI2	20–60 VDC	13.8 VDC +/- 150 mV	32.0 Amps	35.0 Amps	35.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	90%	30 Amp	-20C to +40C	Drawing B

1. The REMOTE control input requires a voltage between 10VDC and 60VDC referenced to the input ground to enable the output of the converter. Converters ship with a jumper connecting the REMOTE input and the input positive terminal, which must be removed before the control feature will function.

Dimensions

