ISOLATED SERIES 2

Fully Isolated DC-DC Power Converters

ICT Isolated Series 2 DC-DC converters provide additional features not normally found on compact converters. This line delivers higher efficiency, an on/off control contact to help save energy and battery life, three high power models, and a 3-year warranty. The Isolated Series 2 provides the benefits of full isolation at non-isolated converter price levels.

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.

Whether for a vehicle, off-grid power system, or utility substation, Isolated Series 2 converters come with the added assurance of years of proven ICT reliability and performance.

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 160VDC, with outputs in 12, 24 and 48VDC to cover virtually every application requirement.

Up to three Isolated Series 2 converters can be mounted in a standard 19 inch equipment rack using the ICT-RMK2 rack mount accessory kit.

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	ICT1224-5AI2
		10 Amps	ICT1224-10AI2
		20 Amps	ICT1224-20AI2
	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
		20 Amps	ICT206024-20AI2
	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
		20 Amps	ICT206024-20AI2
130VDC	12VDC	20 Amps	ICT9016012-20AI2
	24VDC	10 Amps	ICT9016024-10AI2
	48VDC	5 Amps	ICT9016048-5AI2
19" Rack Mounting Kit, holds 1, 2 or 3 converters			ICT-RMK2

TECH NOTE

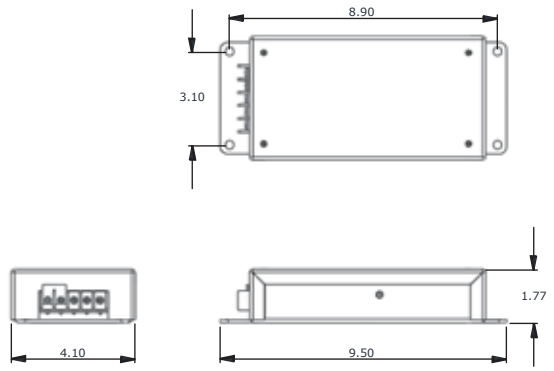
DC converters are used to take the DC voltage from a power source such as a vehicle battery that may be 24, 36 or 48VDC, and convert it to a different voltage such as 12VDC to power a two-way radio, GPS, surveillance camera or other device. Isolated converters are useful in that they operate in a positive or negative ground environment, and provide isolation from the chassis. They can also be used to change the polarity required. For example, an isolated converter can convert -48VDC to +12VDC for a two-way communications radio at a site.

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 3)	Dimensions Refer to Drawing:	Remote Terminal Oepration:
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	-30C to +60C	A	Note 1)
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	-30C to +60C	B	Note 1)
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	-30C to +60C	A	Note 1)
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	-30C to +60C	A	Note 1)
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	-30C to +60C	B	Note 1)
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	-30C to +60C	A	Note 1)
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	-30C to +60C	A	Note 1)
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	-30C to +60C	A	Note 1)
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	-30C to +60C	A	Note 1)
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	-30C to +60C	A	Note 1)
ICT206024-20AI2	20-60 VDC	27.6 VDC +/- 300 mV	16.0 Amps	20.0 Amps	21.0 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	30 Amp	-30C to +60C	B	Note 1)
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	-30C to +60C	B	Note 1)
ICT9016012-20AI2	90-160 VDC	13.8 VDC +/- 150 mV	17.0 Amps	20.0 Amps	20.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	90%	5 Amp	-30C to +60C	A	Note 2)
ICT9016024-10AI2	90-160 VDC	27.6 VDC +/- 300 mV	8.0 Amps	10.0 Amps	11.0 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	5 Amp	-30C to +60C	A	Note 2)
ICT9016048-5AI2	90-160 VDC	55.2 VDC +/- 600 mV	4.0 Amps	5.0 Amps	5.25 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	5 Amp	-30C to +60C	A	Note 2)

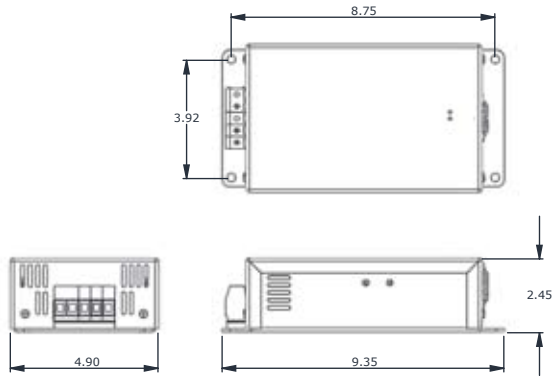
1) The REMOTE control input requires a voltage between 10VDC and 60VDC referenced to the input ground to enable the output of the converter. Converters ship with a jumper connecting the REMOTE input and the input positive terminal, which must be removed before the control feature will function.
2) The REMOTE control will disable the converter when the remote terminal is connected to the INPUT NEG terminal of the converter. The converter is enabled when the REMOTE terminal is left floating.
3) Derate 1%/ C > 40 C.

Dimensions

Drawing A



Drawing B



The Power of Reliability

Innovative Circuit Technology Ltd.
26921 Gloucester Way, Langley, BC, Canada V4W 3Y3
Tel: 604-856-6303 I Fax: 604-856-6365 I Email: sales@ictcorporate.com I www.ict-power.com