



# AC-DC / DC-AC BIDIRECTIONAL POWER CONVERTER

FORMIDABLE POWER CAPABILITY TO 150KW



More Efficient



High Power Density



Configurable



## DC-AC BIDIRECTIONAL

Power	Up to 150kW
AC Input/Output	105-240 VAC 360-800 Hz
DC Input/Output	300-1000VDC
Designed to	RTCA-DO-160 MIL-STD-704 MIL-STD-461

Leading the way in the future of sustainable power conversion for aerospace and defence platforms, TT Electronics introduces a state-of-the-art Bidirectional Power Converter. Designed to military standards, this cutting-edge solution offers formidable power capability and leading-edge efficiency while being compact and lightweight.

Perfect for enabling electrification and next-generation technologies, the Bidirectional power converter to 150kW delivers up to 5 times more system power of traditional converters while enabling increased electrification with unmatched efficiency >96%.

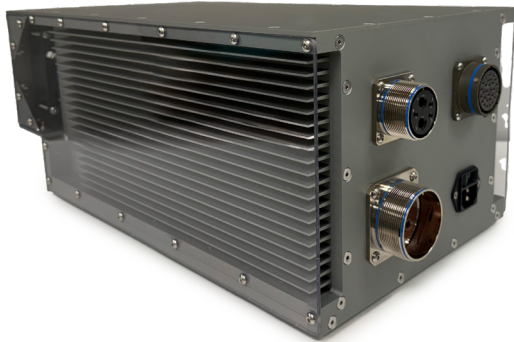
Its universal design ensures seamless integration with existing systems through a modular architecture that supports a range of voltages and power levels that meets diverse mission requirements.

### At the Forefront of Power Conversion Technology

At TT Electronics, we have decades of experience in power conversion engineering, delivering the highest quality and reliability. From electrical system platform upgrades to more-electric aircraft and tactical microgrids, TT Electronics is at the forefront of next-generation designs in a rapidly evolving landscape, where power, precision, and sustainability converge.



# BIDIRECTIONAL POWER CONVERTER



## KEY FEATURES

Universal Usage & Configurable

Power to 150kW

AC Input/Output: 105-240VAC, 360-800Hz

DC Input/Output: 300-1000VDC

Efficiency: >96%

Operating Temperature: -40 to +70°C

Designed to: RTCA-DO-160. MIL-STD-704. MIL-STD-461

Typical applications include Electrification and electrical system upgrades on Aircraft, Land and Naval Platforms. More Electric Aircraft (MEA) & EVTOL and tactical microgrids.



## CONFIGURATIONS



### BIDIRECTIONAL

#### QUALIFICATION

M - MIL-Aero

A - Commercial-Aero

N - Naval Application

T - Ground / Tactical Vehicle

#### MODEL POWER CONFIGURATION

05

U - Universal (real time configurable to any model)

10

B - Bi-Directional / bus converter / bridge converter

15

C - Unidirectional bus converter

30

M - Motor control

50

S - Servo control / position control

75

I - Current source inverter

125

150



## GET IN TOUCH

**TT Electronics**  
520 N Rogers Road,  
Olathe, Kansas, 66062

**Steve Garfield**  
Business Development Director  
[steve.garfield@ttelectronics.com](mailto:steve.garfield@ttelectronics.com)

In development. Specifications subject to change.