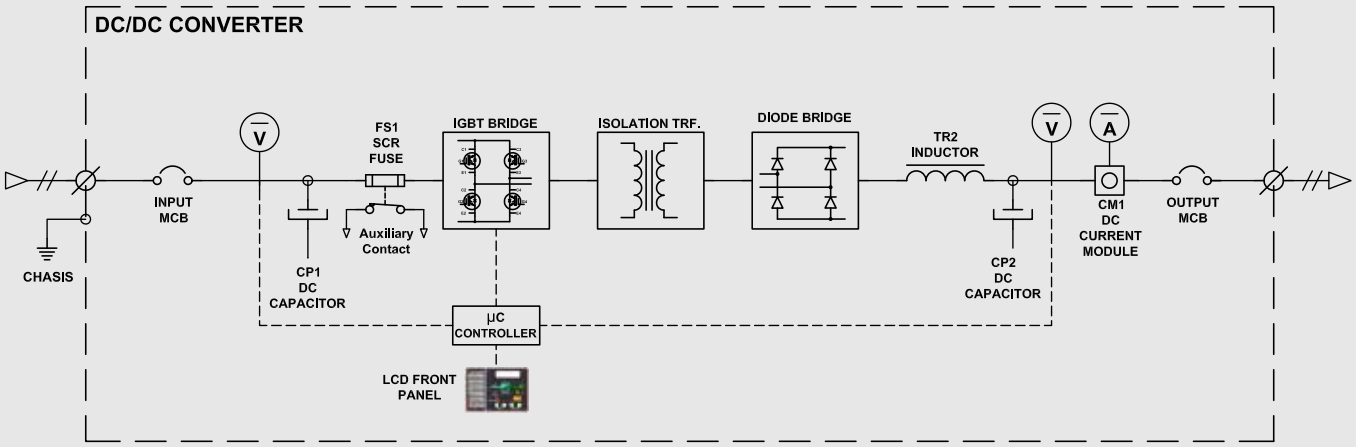
DC – DC CONVERTER

PMI DC / DC Converters have full IGBT bridge topology, this topology allows all the switching devices to switch with zero voltage switching (ZVS) resulting in lower switching losses and an efficient converter. If required voltage levels are different than the generated DC Voltage on Rectifier Output, Rectifier Output DC Voltage can be converted to another DC Voltage with fully isolated system.

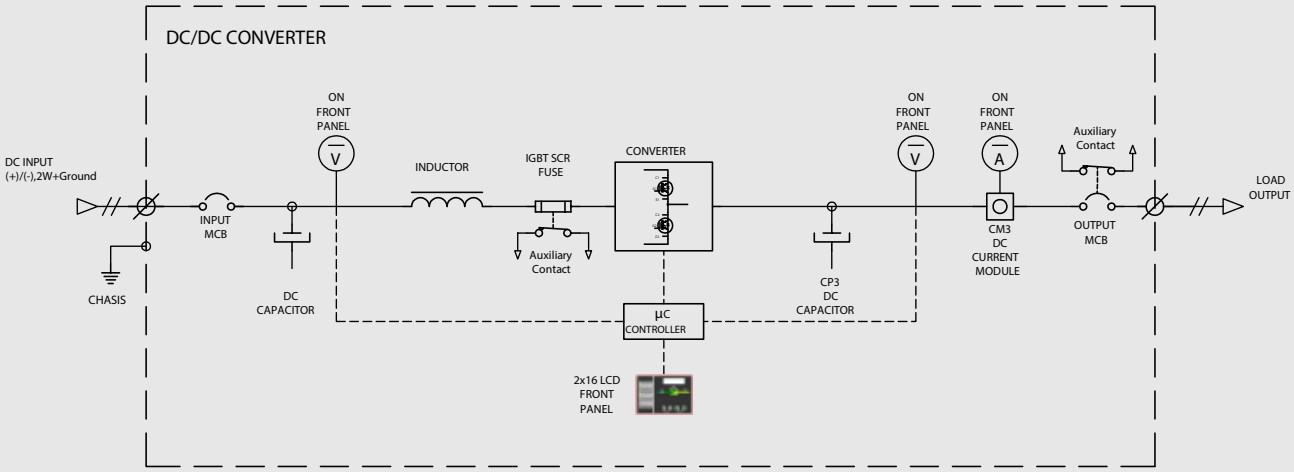
FEATURES

- Full Bridge High Frequency IGBT Module
- Customized input range based on specification
- +/- 1% Output Voltage Stability
- Buck (decrease) and Boost (increase) DC/DC Converter (Optional as only Buck or Only Boost)
- DC/DC Converter can be used in DC Charger as a voltage regulator instead of Dropper Diode
- High reliability
- High efficiency
- Compact Design
- Electronic short circuit protection
- Price competitive solution

ISOLATED DESIGN

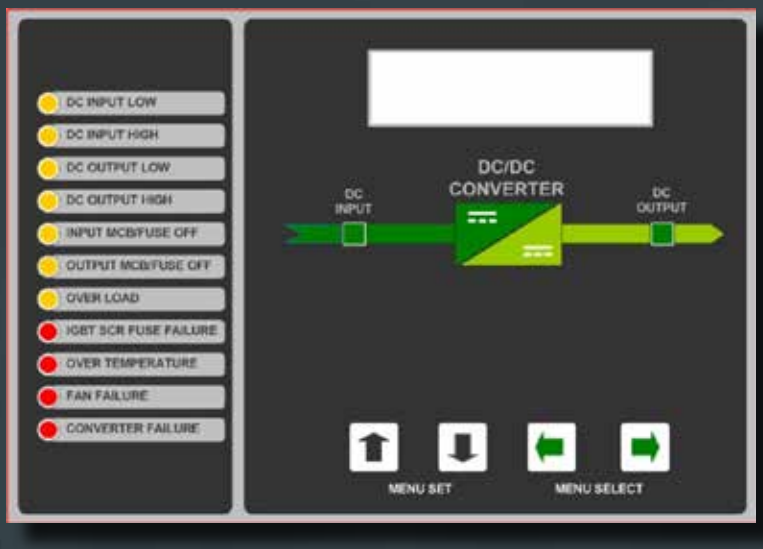


NON ISOLATED DESIGN



PMI
Power Management Instruments

LCD FRONT PANEL



INDUSTRIES

- Utility: Power Generation, Power Distribution, Power Transmission,
- Oil & Gas: Refining, Petrochemical, Offshore Platforms,
- Manufacturing, Cement, Transportation, Mining, Hospitals, Airports

APPLICATIONS

- Low & High Voltage switchgear
- Transformer & Substations
- Industrial control systems
- If there is an already DC supply on the facility with a different voltage level, DC/DC converter is used to supply DC load by converting to desired DC voltage
- For Battery Chargers, DC/DC Converter is an alternative to «Dropper Diodes» by it is lower cost and technical advantages. Additionally, the battery voltage declines as its stored energy is drained. DC/DC converters offer a method to increase voltage from a partially lowered battery voltage thereby saving space instead of using multiple batteries to accomplish the same thing

GENERAL	
Model	DC/DC Convertor
Topology	Full Bridge High Frequency IGBT Module with or without Isolation Transformer
Control	Microprocessor Controlled System
INPUT	
Nominal Voltage and Tolerance	110VDC (90VDC-160VDC) / 220VDC (180VDC-300VDC)
Input Protection	Thermic Magnetic Overcurrent protection via MCB and Overvoltage / Undervoltage protection
OUTPUT	
Rated Current	up to 200A
Nominal Output Voltage	24VDC / 48VDC / 110VDC / 220VDC
Output Voltage Adjustment	+/-10 adjustable
Output Tolerance	1% (may vary according to input and output voltage values)
Output Protection	Short Circuit, Overvoltage, Overload protection
DISPLAY PANEL & MEASUREMENT	
Measurements	Input Voltage, Output Voltage, Output Current
Indicators	DC Input High, DC Input Low, DC Output High, DC Output Low, Input MCB/FUSE OFF, Output MCB/FUSE OFF, Overload, IGBT SCR Fuse Failure, Overtemperature, Fan Failure, Converter Failure
Adjustable Parameters	Output Voltage and Current
Sound Alarm	On Warning Messages 2 Short 'beep' per 2 seconds
ALARM CONTACTS	
Open or closed free alarm contacts	Input MCB OFF , Output MCB OFF, over output voltage, convertor failure, over temperature
SAFETY & ENVIRONMENT	
Isolation Voltage	2000VAC input/chassis and output/chassis (for isolated system)
MTBF	100,000 hrs. (w/out battery group)
Enclosure Material	Mild Steel, Zinc-phosphate coated; 100 µm electrostatic paint; 1.5 mm thickness
Cooling	Forced fans
Cable Entry	Bottom
Operating Temperature	-10 / +40 °C
Relative humidity	5 - 90 %
Operating Altitude	Max. 2000 Mt.
Noise Level	Max. 60 db