

# Yonder 30-kW DC Converter





## Yonder 30kW Module:

This Module is specifically crafted for Electric Vehicle (EV) DC Chargers. It boasts several advantages, including superior efficiency, compact power density, and exceptional reliability. It operates on a three-phase, four-wire alternating current (AC) input, with a DC output voltage range extending from 150 to 1000 volts and is capable of providing an output power of 30 kW.

- The device meets the standards for Electromagnetic Compatibility (EMC) and Electromagnetic Interference (EMI).
- This design ensures both high performance and long-term dependability, making it a reliable choice for EV charging systems.





### Yonder 30kW Module:

#### Key Features:

- Wide input voltage range 260 to 530VAC without neutral.
- Wide input frequency range 45 to 65 Hz.
- Unity Power factor.
- Input harmonics ≤ 5%
- DSP design with digital control for AFE & DC-DC section.
- Galvanic isolation between input and output.
- Modular design capable of parallel operation.
- CAN Communication Interface.
- Compact and light weight design suitable for EV Charger application.





# Technical Specification:

Parameters	Specification
Capacity	30kW
Input	
Nominal voltage	400 VAC, 3PH+PE
Voltage Range	260 to 530VAC
Frequency	50Hz :45~65Hz,
Power factor	≥0.99
Harmonic Distortion (Ithd)	≤5%
Output	
Voltage Range	150 ~ 1000VDC
Current Range	0 ~ 100A
Output Power	30kW at O/P Voltage ≥ 300VDC
Voltage Accuracy	≤0.5%
Current Accuracy	≤ 1%
Load Regulation	≤ 1%
Line Regulation	≤ 1%
Efficiency	≥ 95% At rated load condition
	≥ 96% Peak Efficiency
General	
LED display	Output Voltage and Current, Fault & Alarms
Cooling System	Force Air cooled with Fan speed control
Standby Power consumption	≤ 12W@ Nominal Input Voltage
Noise level setting	Mode-1: Max 75 dB, Mode-2: Max 65 dB, Mode-3: Max 55 dB
Communication interface	CAN Bus
Acoustic noise	≤60dBA   @ 1 meter from unit and 1.25 meter above
	floor level at 1000VDC@30A
Operating Temperature	-40°C to +75°C. Output Power deration above 55°C
Storage Temperature	-40°C to +70°C.
Altitude	2000 mtrs.
Relative Humidity	5 to 95% RH non-condensing
EMC	IEC 61851-21-2 :2018
Dimension	110mm (H) x 385mm (W) x 400mm (D)
Weight	≤23 kg



# Power Derating Curve:







