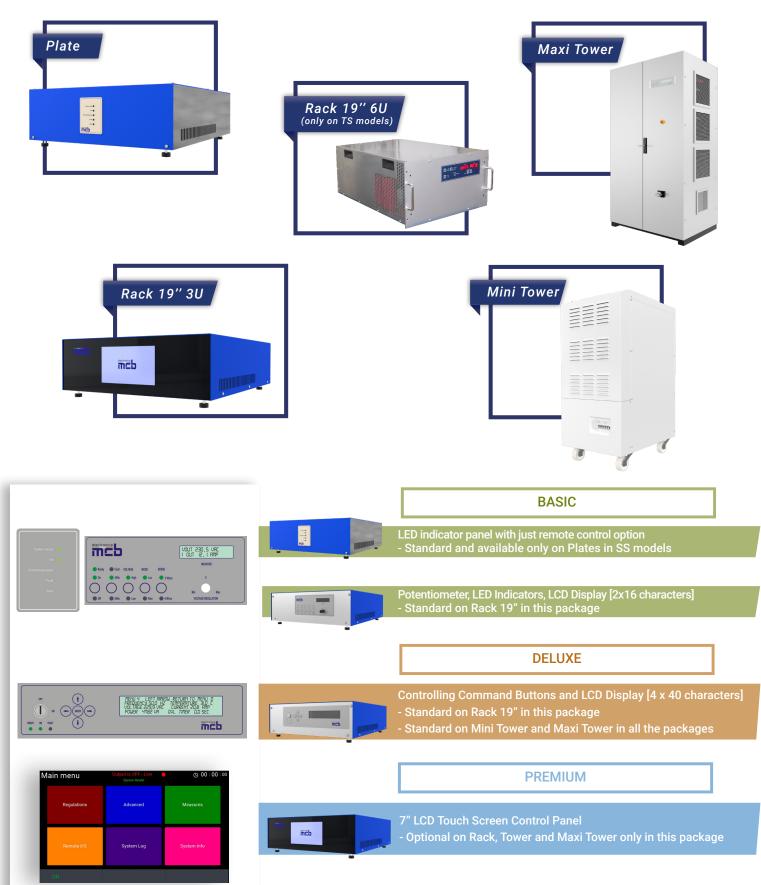


# **POWER-BOOST**

# **Our Technical Solutions**



# **Power-Boost**

# 3in1 AC/AC POWER SOURCE

# Frequency Converter, Voltage Regulator and Voltage Stabilizer

Power-Boost Series is a value for money cost-effective solution to meet the needs of Frequency conversion, Voltage regulation and stabilization, especially for high power applications where also the three-phase power is available.

Power-Boost permits a high dimension power rate that can supply any load types (resistive, inductive and capacitive) with a perfect sinusoidal output waveform. Power-Boost covers a broad array of applications such as household appliances, automotive test benches, electric motors, automated production lines, electronics, medical equipment, lighting, maritime, aviation, power grid, industry and many more.

#### AT A GLANCE:

- Equipped with half bridge inverter with autotransformer in output for powers up to 30kVA [optional isolation transformer]
- Equipped with full bridge inverter with isolation transformer in output for 45kVA and 60kVA powers
- Equipped with full bridge inverter with autotransformer in input and isolation transformer in output for powers equal and above 80kVA
- Phases working mode:
  - o SS [1-phase input and output]
  - o TS [3-phase input 1-phase output]
  - o TT [3-phase input and output]
- Standard Available Power:
  - o SS [1.5kVA 3kVA 5kVA 7.5 kVA]
  - o TS [10kVA 17.5kVA 25 kVA]
  - o TT [9kVA 15kVA 21kVA 30kVA 45kVA 60kVA 80kVA 100kVA 150kVA]
- 3 Upgrade Packages available to fulfill all the possible configurations [Basic, Deluxe, Premium]
- Mechanical:
  - o Plate available only for SS devices in Basic Package.
  - o Rack 19" 3U available on SS family. It comes with removable handles so that it can be used as Desk Box as well.
  - Housing powder coated in MCB blue navy colour
  - o Rack 19" 6U only on TS family
  - o Mini Towers available in TS and TT families up to 30kVA Power
  - o Maxi-Tower available in TT families for Powers equal to and above 45kVA
- Control Panels:
  - o LED indicators and just remote control on Plates [only on SS Basic]
  - o LCD Display 2 x 16 along with potentiometer on Rack 19" on SS Model Basic Package
  - o LCD Display 4 x 40 along with command buttons on all the SS models in Deluxe and Premium packages as well as on all the
  - Mini Towers and Maxi Towers in any package
  - o 2 x LED strings along with command buttons on the Rack 19" 6U (only on TS models)
  - o LCD 7" touch screen [optional on Premium packages]
- · Communication Interfaces (Remote Control):
  - o Physical Interfaces: RS-232, Ethernet, 12 poles I/O
  - o Communication protocols: SCPI (over RS-232 and Ethernet), 0-10Vdc (over analog I/O 12 poles),
  - ASCII with optional SCPI adapter (only on Rack 19" TS models)
  - o LabView Drivers

#### STANDARD FEATURES

- Voltage Regulation [PH-N]: double range 2-150Vac and 4-300Vac
- Sensing Function
- Switchable Frequencies: 50Hz, 60Hz, 400Hz
- Frequency Regulation: from 40Hz to 80Hz
- Setup of the max Current value
- Current regulation
- Cosφ and Frequency values visualization
- Phases Offset Modulation in TT models [0°, 120°, 180°]
  - o 0° Three-Phases synchronization to attain
  - a Single-Phase output [TS working mode]
  - o 120° European Three-Phase working mode
  - o 180° American Two-Phase working mode

#### **POSSIBLE CUSTOMISATIONS**

- Custom Powers up to 240kVA parallelizing and synchronizing more units
- Different Voltage input range
- Higher Voltage output range [up to 700Vac]
- Different Frequency input range
- Broader Frequency output range [up to 400Hz]
- Adaption to Current Generator
- Adaption to ST working mode [1-phase input 3-phase output]



## **Power-Boost**

## Power-Trust

Unlike the Power-Boost, the Power-Trust is not equipped with any transformer and it's available just in SS and TS versions (1-phase/1-phase and 1-phase/3-phase)

	Basic	Deluxe	Premium	Basic	Deluxe	Premium	
Single-Phase [SS] - Power [1.5kVA-3kVA- 5kVA - 7.5kVA]	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Three-Phase Single-Phase [TS] - Power [10kVA-17.5 kVA - 25kVA]	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Three-Phase [TT] - Power [9kVA-15kVA-21kVA-30kVA-60kVA -80kVA-100kVA-150kVA]	$\checkmark$	$\checkmark$	\$\lambda\$	Optional	Optional	Optional	
Autotransformer	$\checkmark$	$\checkmark$	$\checkmark$	-	-	-	
Isolation Transformer	Optional up to 30kVA, Standard from 45kVA to 150kVA			-	-	-	
Output Voltage Regulation Range - Local [PH-N]	125Vac ± 25Vac 250Vac ± 50Vac	2 - 150Vac 4 - 300Vac		SS [from 2 Vac to Vinput - 4Vac] TS [200-300Vac]			
Output Voltage Regulation Range - Remote [PH-N]	2 - 150Vac 4 - 300Vac						
Voltage Switch between LOW Voltage Range 150Vac to HIGH Voltage Range 300Vac	Manual	Manual and Automatic	Manual and Automatic	-	-	-	
Sensing Function	$\checkmark$	$\checkmark$	$\checkmark$	-	-	-	
Max Current Setup	-	-	$\checkmark$	-	-	$\checkmark$	
Current Regulation	-	-	$\checkmark$	-	-	$\checkmark$	
Third Frequency Value beside 50Hz and 60Hz	-	√[400Hz]	√ [400Hz]	-	√ [400Hz]	√ [400Hz]	
Frequency Regulation	-	√ [40Hz - 80Hz]	√ [40Hz - 80Hz]	-	√ [40Hz - 80Hz]	√ [40Hz - 80Hz]	
Phases Offset Modulation on 3-phase models [TT]	-	-	✓ [0°, 120°, 180°]	-	-	Optional	
Remote Control - Communication Interfaces	RS232 and Ethernet with SCPI protocol and analog I/O 12 poles with 0-10Vdc. Except for Rack 19" TS : RS232 (optional Ethernet adapter) with ASCII code (optional SCPI adapter) and analog I/O 10 poles with 0-10Vdc			RS232 and Ethernet with SCPI protocol and analog I/O 12 poles with 0-10Vdc. Except for Rack 19" TS : RS232 (optional Ethernet adapter) with ASCII code (optional SCPI adapter) and analog I/O 10 poles with 0-10Vdc			
LED Indicators Panel [only remote control]	√ [only on Plates SS models]	-	-	√ [only on Plates SS models]	-	-	
2 x LED strings + Command Buttons	√ [only on Rack 19" TS models]			√ [only on Rack 19" TS models]			
LCD Display [2 x 16] + Potentiometer	[Only on SS models]	-	-	[only on SS models]	-	-	
LCD Display [4 x 40] + Command Buttons	✓ [Only on Towers]	$\checkmark$	$\checkmark$	✓ [Only on Towers]	$\checkmark$	$\checkmark$	
LCD Touch Control Panel [7"]	-	-	Optional	-	-	Optional	



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