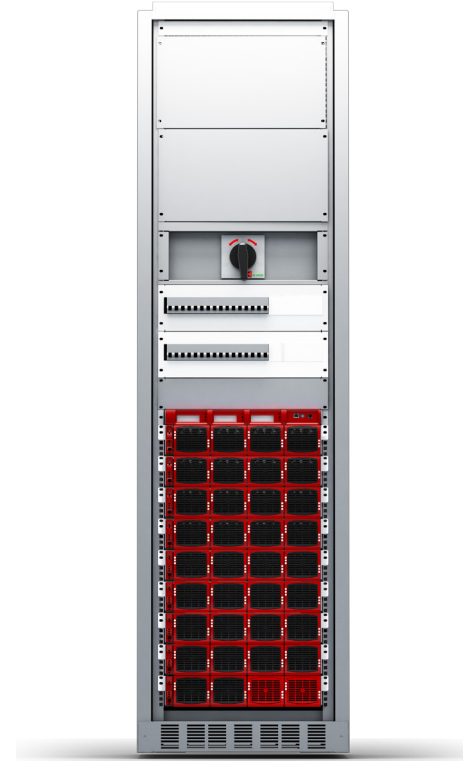


# TSI MIPS Large Systems

## 150 kVA - 48Vdc - 3X208Vac

### Benefits

- **Energy Efficient** : The TSI technology performance is unmatched in the industry. 95% in AC to AC double conversion (EPC mode)
- **Maximum Reliability** : The TSI technology eliminates the Static Transfer Switch (STS), the single point of failure in a traditional inverter design
- **Scalable** : TSI features a parallel design. Hence, modules are HOT swappable and field upgradable.
- **Power Density** : The TSI inverter has the industry's highest power per square area
- **Enhanced Power Conversion (EPC)** : Processes all incoming AC mains supply to ensure clean, reliable power is delivered to the critical applications.



<b>The Challenge</b>	Meeting the diverse and changing power requirements of today's mission critical loads.
<b>The Solution</b>	The Modular Inverter Power System with hot swappable modules that are connected to the DC and AC sources, producing an uninterrupted, reliable AC supply.
<b>Why CE+T Power?</b>	CE+T is the AC critical power solutions provider for the Telecom, Industrial Oil & Gas, and Data Center markets. CE+T is an industry leader in the power conversion technology. TSI technology has revolutionized the inverter market with its new range of modular, scalable products to support telecom (48V) or industrial (110V, 220V) applications.
<b>The System</b>	With the BRAVO 2500VA Inverter module as its building block, the TSI MIPS – Large systems are modular and scalable to capacities up to 225kVA (75 kVA per enclosure). They are easily configured to your current and future AC requirements.

# TSI MIPS Large Systems

150 kVA - 48Vdc - 3X208Vac

## Operation Mode

The TSI Enhanced Power Conversion mode develops a high quality AC by drawing power simultaneously from the AC mains and DC sources and presents a regenerated AC for critical application. Since the system draws power from each source simultaneously, output power is guaranteed as long as one input source is available.

Optional output protection and distribution may be provided

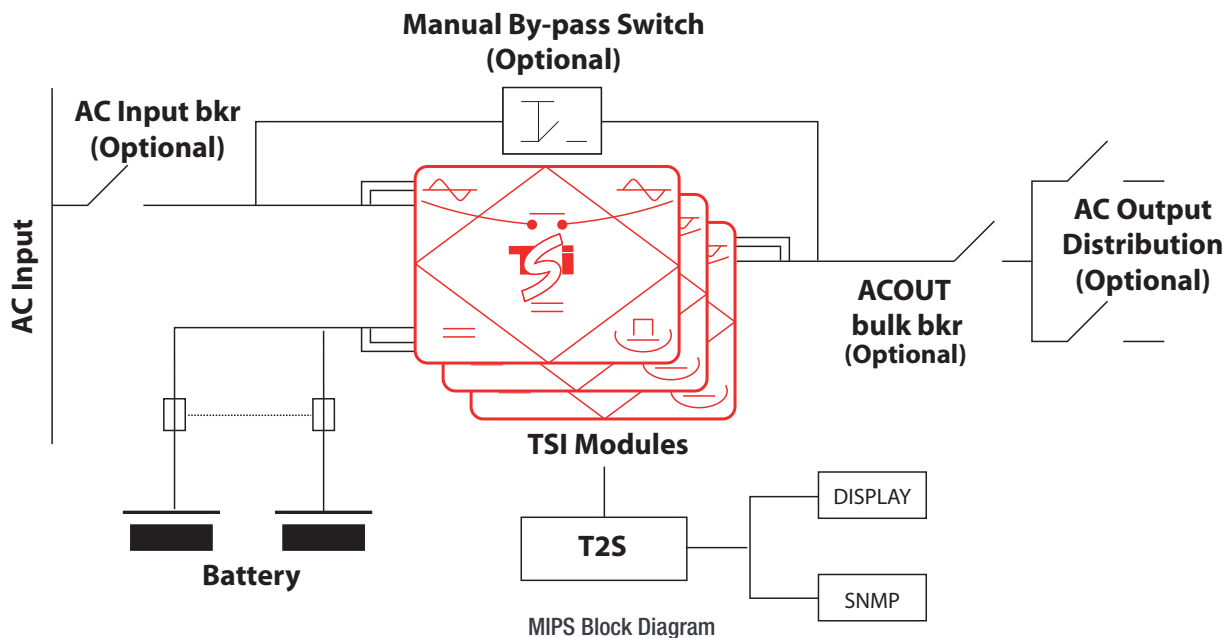
## The System

The MIPS rack provides convenient access for connecting the AC input, DC input, and AC output wiring.

All configurations are integrated in framed enclosures of 600mmx600mmx2100mm (24inx24inx84in)WxDxH, each

Optional:

- AC input breaker supplementary
- AC output breaker supplementary
- AC input surge suppression



# TSI MIPS Large Systems

## 150 kVA - 48Vdc - 3X208Vac

### GENERAL

■ EMC (immunity)	EN 61000-4
■ EMC (emission)	EN 55022 (Class A)
■ Safety	UL1778 Listed
■ Cooling	Forced
■ Isolation	Doubled
■ MTBF	240000 hrs
■ Efficiency (Typical)	
■ Enhanced Power Conversion	95%
■ On Line	90%
■ Dielectric strength DC/AC	4300Vdc
■ True Redundant Systems	Compliant
3 disconnection levels on ACout and DCin power ports	
4 disconnection levels on ACin port	
■ RoHS	Compliant
■ Connection I/O	Terminal block
Protected against inversion of polarity	

### DC INPUT SPECIFICATIONS

■ Nominal voltage (DC)	48 V
■ Voltage range (DC)	40 - 60 V
■ Nominal current (at 40Vdc)	2778A
■ Maximum input current (15s)	4167A
■ Voltage ripple	< 2mV

### AC INPUT SPECIFICATIONS

■ Nominal voltage (AC)	3x208V
■ Voltage range (AC L-N)	83-140Vac
■ Conformity range	Adjustable
■ Power Factor	>99%
■ Frequency range (selectable)	50 - 60 Hz
■ Synchronization range	47 – 53 Hz 57 – 63 Hz

### AC OUTPUT POWER

■ Nominal Output power	150kVA
■ Output power (resistive load)	120kW
■ Short time overload capacity (15s)	150%
■ Permanent overload capacity	110%
■ Admissible load power factor	Full power rating from 0 inductive to 0 capacitive
■ Internal temperature management and switch off	

# TSI MIPS Large Systems

## 150 kVA - 48Vdc - 120/240/208Vac

### AC OUTPUT SPECIFICATIONS

- Nominal voltage (AC) 3x208 V
- Voltage range (AC L-N) 90-130V
- Voltage accuracy +/-1 %
- Frequency 50 - 60 Hz
- Frequency accuracy +/-0.1%
- Load impact recovery time 0.4 ms
- Turn on delay 40 s
- Nominal current 416A/Phase  
Protected against reverse current
- Crest factor at nominal power 3.1 In  
With short circuit management and protection
- Short circuit clear up capacity 10x In for 20msec

### SIGNALING & SUPERVISION

- Display LED + Touchscreen
- Alarms output Dry contacts
- Monitoring via Catena monitoring device  
(includes TCP-IP)

### WEIGHT & DIMENSIONS

- Width 24" x 2
- Depth 24"
- Height 84"
- Weight (net) 2x Approx 840lbs  
2x 380kg
- Material (casing) Coated steel

### TRANSFER PERFORMANCES

- Maximum voltage interruption 0 s
- Total transient voltage duration (max) 0 s

### ENVIRONMENT

- Altitude above sea without derating <1500 m
- Derating slope upper than 1500m 0,8% by 100m
- Ambient temperature - -20 to 40 °C
- Storage temperature - -40 to 70 °C
- Relative humidity 95% , non condensing