

# SIRIO-T

The **SIRIO-T** product family is a premium, **transformer-based UPS platform** designed for high power applications where reliability and performance are non-negotiable. **SIRIO-T** combines high efficiency, robust transformer-based architecture, and scalable design to ensure continuous power for mission-critical applications.

**100% made in Italy**



The **SIRIO-T** by POWERTRONIX features VFI online double conversion technology, delivering high power quality and reliable backup for mission-critical electrical infrastructures in industrial, medical, banking, and corporate environments. Its IGBT-based architecture with an isolation transformer at the inverter output ensures superior robustness, high reliability, and stable operation even under harsh operating conditions. Equipped with advanced monitoring and communication features, dual mains input, internal manual bypass, and parallel operation capability, SIRIO-T represents a robust and flexible solution for three-phase, high-power critical applications.

#### **TYPICAL APPLICATION:**

- Industry
- Medical equipment
- Data Centers
- IT network
- Transportation
- Malls and large buildings

VFI-SS-111

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200kVA-500kVA

MODEL	SRT200	SRT250	SRT300	SRT400	SRT500
<b>UPS NOMINAL RATING (kVA)</b>	200	250	300	400	500
<b>UPS ACTIVE POWER (kW)</b>	180	225	270	360	400

## TECHNICAL SPECIFICATIONS

### Input:

INPUT NOMINAL VOLTAGE	220/380- 230/400-240/415 VAC (4 Wires)
INPUT VOLTAGE TOLERANCE	Standard +20% - 25% @ 100% load with no derating, ± 15% @ 240/415 VAC
INPUT NOMINAL FREQUENCY	50/60 Hz ±10%
INPUT THDI	<=5%
INPUT POWER FACTOR	≥0,98

### Output:

OUTPUT NOMINAL VOLTAGE	220/380- 230/400-240/415 VAC (4 Wires)
OUTPUT FREQUENCY	50/60 Hz
OUTPUT FREQUENCY TOLERANCE	±2%
OUTPUT THD-V	<= 2% @ 100% linear Load
CREST FACTOR	3:1
OUTPUT OVERLOAD	100-125% :10 minutes, 125-150%: 1 minutes, above 150% on bypass
EFFICIENCY	up to 93% @ full load

### Bypass

BYPASS NOMINAL VOLTAGE	220/380- 230/400-240/415 VAC (4 Wires) , 50/60Hz ±2%
BYPASS OVERLOAD	10In PER 100ms

### Battery

BATTERY CONFIGURATION	External - 2 x 28blocks +N
BATTERY CHARGING I&V*	13,5Vdc/blocks , 0.1C to 0.3C selectable – 0.1C factory setting
BATTERY COMPATIBILITY	VRLA-AGM / VRLA-GEL / NiCd
BATTERY MANAGEMENT	Auto Test / Equalization / Smart-battery management Boost Charge & Temperature compensation(optional)

### Environment

DIMENSIONS (HxWxD mm)	1770*825*855	1900x1250x1055	2020x2250x770		
WEIGHT (W/O Battery)	915	1150	1285	1500	2400
TEMPERATURE & RH%	0+40°C – RH% up to 90% non-condensing - 1.000m slm				
NOISE	<68dB		<73dB		
EXTERNAL INTERFACES	TFT panel with 5 vectorial buttons, buzzer for alarm signaling, 2 x RS232 serial ports, 4x dry contact, EPO OPTIONAL: SNMP card, MODBUS card, +4 Dry contacts, remote panel				
DEVICE TYPE	CLASS 1 – IP 20 (Standard)				
PROTECTION CLASS	Other IP rating on request				

### Others:

EUROPEAN DIRECTIVES	LV 2014/35/EU Low Voltage Directive EMC 2014/30/EU Electromagnetic Compatibility Directive / CE marks
STANDARDS	Safety IEC EN 62040-1; IEC EN 62040-2 EMC; RoHS Compliance; IEC EN 62040-3 ( Voltage and Frequency Independent) VFI-SS-111

## Key features

- **Fully digital DSP-controlled architecture**, designed for fast and precise control of all UPS operating stages, ensuring stable and reliable performance even under highly dynamic and unbalanced load conditions.
- **Dedicated DSPs for inverter and rectifier/PFC control**, providing enhanced system stability, accurate power regulation, and long-term operational reliability in demanding electrical environments.
- **Output isolation transformer integrated into the inverter stage**, ensuring full galvanic isolation between input, bypass, and load, improving fault tolerance, electrical safety, and compatibility with industrial and critical installations.
- **Advanced self-diagnostics** and comprehensive event logging, with time- and date-stamped alarms, enabling effective preventive maintenance, fast troubleshooting, and reduced downtime.
- **Automatic battery testing** and real-time remaining backup time indication, improving operator awareness and ensuring safe, predictable system operation during backup conditions.
- **Advanced battery management system**, featuring multi-level battery protection and optimized charging algorithms to extend battery lifetime and ensure reliable energy availability.
- **High battery charging current capability**, with optional temperature-compensated charging, ensuring fast recharge times and consistent battery performance across a wide range of ambient conditions.
- **Split bypass input configuration**, allowing independent mains and bypass sources, increasing system availability, installation flexibility, and resilience in complex electrical infrastructures.
- **Comprehensive protection features**, including short-circuit protection, overload protection, high output fault current capability for proper downstream selectivity, output current limiting, and DC leakage protection, ensuring safe operation of both the UPS and connected loads.;

### Accessories:

+ SNMP/TCP-IP

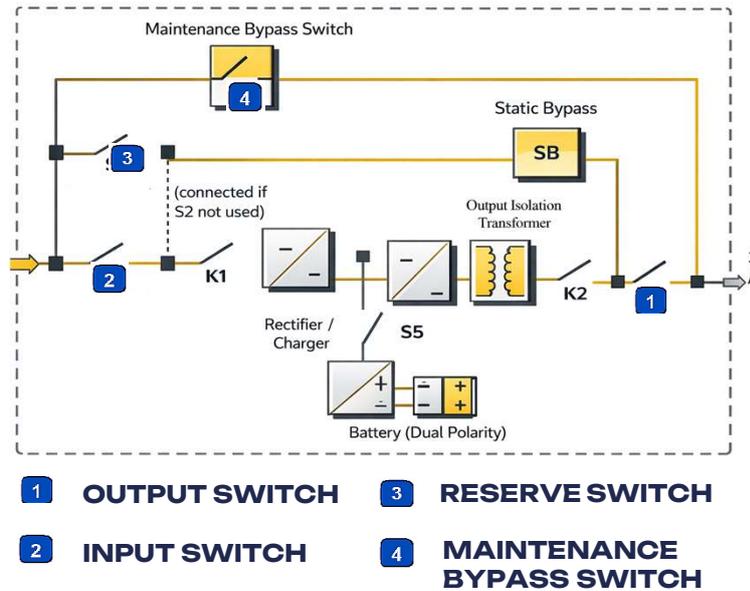
+ REMOTE PANEL

+ MODBUS

The SIRIO-T series offers the possibility to integrate the UPS into your **Local Area Network**, enabling remote monitoring and control of the UPS status. Alarm can be triggered, managed and shared via TCP/IP

The SIRIO-T series can optionally be equipped with an external monitor for remote control. Such panel allows full monitoring and control of the UPS.

The SIRIO-T series can be equipped as optional , with a **Modbus card via RS485** or with a **ModBUS via TCP-IP** for full integration into your Building management systems (BMS) .



# POWERTRONIX

## Secure Power

# Innovation That Saves