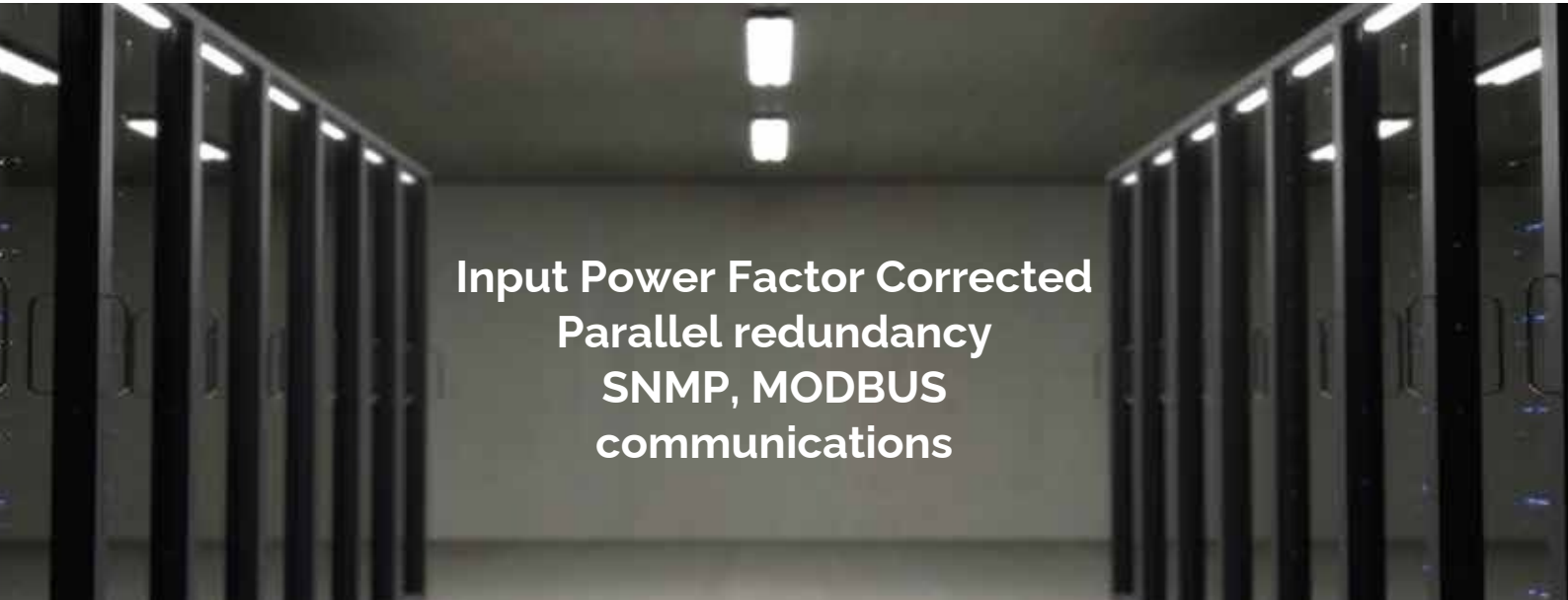


PFC-303ITR-series

Online UPS for mission critical application



Input Power Factor Corrected
Parallel redundancy
SNMP, MODBUS
communications

PFC-303ITR - 10KVA - 400KVA



Applications

Data centers, Critical servers
Work stations, network devices
Mission-critical applications

Advanced Active Redundant Power Supply

Industrial-grade design

Premium grade quality power
using power-conditioning topology

Ensure redundancy.... Using load sharing PRS UPS



Parallel redundancy with 50-50 load sharing.

Critical servers, data centers and such mission-critical applications, use Online UPS with "N+2" configuration to ensure redundancy.

By dividing the load equally among all of the UPS, the overall load demand is satisfied. The remaining UPSs can keep up with the load even if one fails.

This also makes it possible for UPS maintenance to be performed without affecting the load. When servicing, modules can be turned off while the remaining UPS keeps the load going.

Advanced Active Power PFC Online UPS

Features

- Power Factor Corrected
- Digital Signal Processor
- Isolation Transformer
- SNMP
- Autobypass

Power Factor Correction

- Reduces the running cost in terms of electricity bill
- Prevents the overrating of electrical wire
- Reduce reflected harmonics back to the source
- Savings in sizing of utility transformer & generator

Technology

- DSP technology IGBT inverter - IGBT converter

Topology

- Bifilar PWM switching

Interface

- SNMP compatible
- User-friendly LCD display
- True RMS reading
- Fault condition
- Status display
- Event logging

Ideal Power-conditioner

- Constant Frequency source
- Premium Quality Galvanically isolated Power
- Power Factor Corrector

100% Indigenous design



IGBT based PFC rectifier



Industrial Grade
Designed for Harsh Environment

100% Indigenous Factory - With In-House R&D.

Applications

- Data center
- Critical servers
- Work stations
- Network devices
- Mission-critical applications

Uninterrupted Premium Quality Power using Power-Conditioning topology

The factors contributing to the pre-mature failure of electrical gadgets and eventually the system failure is not limited only to voltage fluctuations but also the poor quality of power. Hence, importance should not only be given for power availability but also for quality power availability.



PFC-303ITR is a complete Power-conditioner & Power Factor Corrector

Optimises the product life & process uptime by 35%-40%.

- Constant voltage, frequency, High Grade Premium quality power.
- Galvanic isolation at the output.
- Operating ambient temperature 0-45 degrees.
- Overload handling capability of 150% for 1 minute.
- High surge handling capability.

Predictive self analysis

The uptime is significantly enhanced using the intelligent DSP based Predictive Self Analysis built-in in the UPS. Using 16 sensors, the UPS periodically carries-out Self Analysis of various parameters and initiates alarm for preventive and corrective action well in advance and facilitates high uptime of machines and process.

SNMP-simple network monitoring protocol

Monitoring

Diagnosis

Preventive action



**GSM based
SMS pre-trip alert for
initiating necessary
preventive action.**

Remote ups monitoring software interface

Monitor the UPS mains input voltage, output voltage, battery voltage, load percentage etc from a remote location.

SNMP feature facilitates the user to **carry-out preventive action remotely** without physically reaching the UPS. Pre-trip alarm pops on the monitoring screen prompting the user/system admin/maintenance engineer to initiate preventive action. Without the SNMP feature, the pre-trip alarms are often unnoticed as the UPS is located away from the users and can cause ungraceful shutdown of machines/servers/process.

TFT, touch screen, color display

**Graphical display of
UPS status, load percentage and battery levels**

- Input voltage
- Output voltage
- Battery voltage
- Output power in KVA
- Output power in KW
- Output PF
- Output frequency
- Load percentage
- Over-temperature warning

Technical Specifications

TECHNOLOGY

DSP BASED, LOAD SHARING, N+2 IN PARALLEL REDUNDANCY CONFIGURATION

Y RATING

10KVA - 400KVA

DC BUS

192VDC - 384VDC

INPUT

INPUT VOLTAGE

INPUT VOLTAGE WINDOW

415VAC, 3Ø & N

INPUT FREQUENCY

330VAC - 470VAC

INPUT PFC

45-55HZ

POWER WALK IN 100% LOAD

> 0.95

RECTIFIER

VOLTAGE REGULATION

SOFT START FOR 0-20 SECONDS POWER WALK-IN.

RIPPLE VOLTAGE

IGBT BASED FULL BRIDGE

CONVERTER PROTECTION

(±) 1%

< 2%

ADVANCED ELECTRONIC PROTECTION FOR DEVICE SAFETY BACKED UP,
WITH MCB'S/ MCCBS & FAST ACTING FUSES

INVERTER

INVERTER TYPE

IGBT BASED MPWM WITH INSTANTANEOUS SINEWAVE CONTROL

OUTPUT PF

0.8 LAGGING TO UNITY

NOMINAL VOLTAGE

415VAC, 3Ø, P-P / 230VAC, 1Ø, P-N

REGULATION

FREQUENCY

(±) 1%

WAVEFORM

50 HZ ± 0.1HZ

TOTAL HARMONIC LINEAR LOAD

TRUE SINEWAVE

< 2%

DISTORTION NON LINEAR LOAD

5%

TRANSIENT RESPONSE

REMAINS WITHIN +/- 5% & RECOVER TO NORMAL WITHIN 20 MSEC

OVER LOAD 100%

CONTINUOUS

CAPACITY 110%

10 MINUTES

150%

1 MINUTE

CREST FACTOR

3:1

MODE OF OPERATION

DESIGNED FOR CONTINUOUS OPERATION

ISOLATION

TRUE ONLINE WITH COMPLETE GALVANIC ISOLATION.

INVERTER PROTECTION

ADVANCED ELECTRONIC PROTECTION FOR DEVICE SAFETY BACKED UP
WITH MCB'S/ MCCBS &

FAST ACTING FUSES, HIGH SPEED PULSE BY PULSE ELECTRONIC DEVICE
PROTECTION OVER VOLTAGE / UNDER VOLTAGE PROTECTION, ELECTRONIC
OVER CURRENT TRIP.
PROVIDED

• INPUT / LOW / FAIL • OUTPUT OVERLOAD • OVER TEMPERATURE • BATTERY LOW

LED INDICATIONS (SINGLE LED WITH MULTIFUNCTION)

• MAINS ON • UPS ON • BATTERY LOW • OVERLOAD

• INPUT VOLTAGE • OUTPUT VOLTAGE • LOAD CURRENT • OUTPUT FREQUENCY • BATT