Microtekpower™
since 1990
Pioneer In Power

Power-Conditioning for Online UPS

Industrial Applications

▪ Automated processing ▪ Non-linearloads
▪ CNC ▪ Wire EDMs ▪ Additive manufacturing

PFC-IG303 10KVA - 400KVA

Advanced Active Power PFC UPS
with Predictive Analysis Technology

Optimise production process to improve Productivity and profitability...

Galvanic isolation offers

Comprehensive Protection and High Availability.

MAINS GRADE RAW POWER CONTAINS IMPURITIES AND LARGE PERCENTAGES OF HARMONICS INJECTED INTO THE LINE BY VARIOUS NON-LINEAR LOADS. THE COMMON PROBLEM OF NEUTRAL DRIFT CAN PRODUCE CONSIDERABLE INCREASE IN OUTPUT VOLTAGE AND PERMANENTLY DESTROY YOUR CRITICAL LOADS AND DATA.

ISOLATION TRANSFORMERS INCREASE LOAD PROTECTION AND ENSURE HUMAN SAFETY BY ISOLATING THE AC LEAKAGE CURRENT FROM DEVELOPING A POTENTIAL BETWEEN THE INPUT AND GROUND. ISOLATED OUTPUT ENHANCES THE ATTENUATION OF COMMON MODE NOISE BY INCREASING THE IMPEDANCE BETWEEN THE INPUT AND OUTPUT.

PROVIDES PROTECTION OF LOADS AGAINST LIGHTNING. GALVANIC ISOLATION VIA TRANSFORMER IS THE ONLYWAY TO SAFELY PROTECT LOADS FROM LIGHTNING. IT PROVIDES PROTECTION FROM HIGH ENERGY TRANSIENTS, WHICH ARE CLAMPED AT THE AC INPUT FROM PROPAGATING TO THE OUTPUT.

Galvanic Isolation for Comprehensive Power Protection

Advanced Active Power PFC-IG303 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 HARMONIES BACK TO THE SOURCE SAVINGS IN SIZING OF UTILITY TRANSFORMER & GENERATOR

Technology

- DSP TECHNOLOGY IGBT INVERTER - IGBT CONVERTER

Toplogy

- BIFILAR PWM SWITCHING

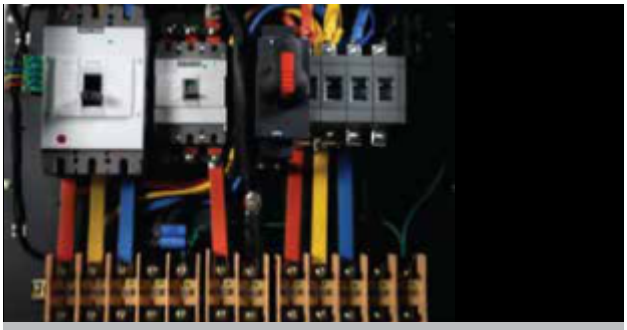
Interface

- SNMP COMPATIBLE
- USER-FRIENDLY LCDDISPLAY
- TRUE RMS READING
- FAULT CONDITION
- STATUS DISPLAY
- EVENT LOGGING

Ideal Power-conditioner

- CONSTANT FREQUENCY SOURCE
- POWER FACTOR CORRECTOR
- PREMIUM QUALITY GALVAICALLY ISOLATED POWER

IGBT based PFC rectifier



Industrial Grade
Designed for Harsh Environment

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

Applications

- PROCESS AUTOMATION
- NON-LINEAR LOADS
- CNC
- WIRE EDMS
- ADDITIVE MANUFACTURING

Uninterupted Premium Quality Power using Power-Conditioning topology

THE FACTORS CONTRIBUTING TO THE PRE-MATURE FAILURE OF ELECTRICAL GADGETS AND EVANTUALLY 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-IG303 is a complete Power-conditioner & Power Factor Corrector

Optimisestheproduct 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.

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

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 INITITAES ALARM FOR PREVENTIVE AND CORRECTIVE ACTION WELL IN ADVANCE AND FACILITAES HIGH UPTIME OF MACHINES AND PROCESS.

SNMP-simple network monitoring protocol

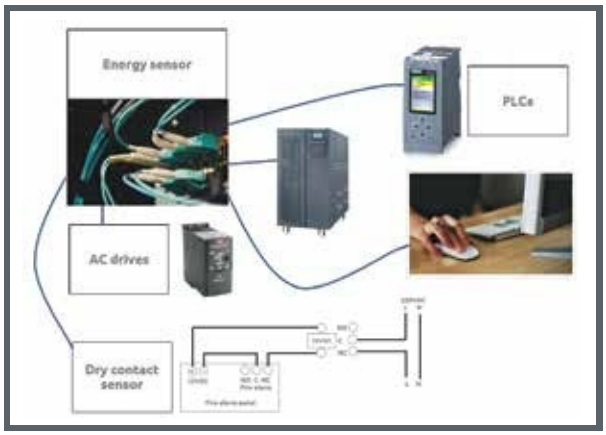
MONITORING | DIAGNOSIS | PREVENTIVE ACT

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

MODBUS-BMS Interface

BMS - BUILDING MANAGEMENT SYSTEM / BAS - BUILDING AUTOMATION SYSTEM / IAS - INDUSTRIAL SYSTEM AUTOMATION SYSTEM, IS A COMPUTER-BASED CONTROL SYSTEM INSTALLED IN BUILDINGS THAT CONTROLS AND MONITORS THE BUILDING'S ENERGY USAGE, LIGHTING, SAFTEY, HEATING/COOLING, POWER SYSTEMS, SECURITY AND SURVEYELLENCE ETC.

FC-400 IS COMPATIBILITY TO COMMUNICATE WITH OTHER EQUIPMENT, NOTIFY FAULTS OR POWER OUTAGE TO CARRY-OUT PREVENTIVE / CORRECTIVE ACTION ARE SOME OF THE UNIQUE BENEFITS OF BMS.



Technical Specifications

10KVA - 400KVA PFC-IG303 - Series Online UPS

		DSP based, IGBT inverter-IGBT converter Online UPS.
RATING		10KVA - 400KVA
INPUT		
Input Voltage Window		330VAC - 470VAC
		45-55Hz
Input PFC	100% load	> 0.95
		Soft start for 0-20 seconds power walk-in.
RECTIFIER		
		IGBT based full bridge
Voltage Regulation		(±) 1%
Converter Protection		Advanced Electronic Protection for device safety backed up, with MCB's/ MCCBs & fast acting fuses
Inverter Type		IGBT based MPWM with instantaneous Sinewave Control
Nominal Voltage		415VAC, 3Φ, P-P / 230VAC, 1Φ, P-N
Frequency		50 Hz ± 0.1Hz
Total Harmonic Distortion	Linear Load	< 2%
	Non Linear Load	< 5%
		Remains within +/- 5% & recover to normal within 20 msec
Over Load Capacity	100%	Continuous
	110%	10 Minutes
	150%	1 Minute
Mode of Operation		Designed for Continuous operation
		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.
Manual Bypass		Provided
		• Input / Low / Fail • Output overload • Over temperature • Battery low
		• Mains on • UPS on • Battery Low • Overload
		• Input Voltage • Output Voltage • Load current • Output Frequency • Battery Voltage