

Advanced Active Power

PFC Online UPS

PFC 301 3Φ-1Φ 5KVA - 40KVA



DSP based
Power Factor Corrected Online UPS

With GSM interface
for remote power monitoring and control

www.bkcinnovations.com

BKC Innovations: -"Empowering Your Future with Reliable Power Solutions"

Predictive self analysis



GSM based monitoring & control

Real time status, Alert mesasage for preventive action.

The intelligent DSP based UPS monitors Battery health and UPS power - sends an SMS alert during fault conditions and also sends a report of the same every day.

User can also receive real-time status of the battery & UPS by sending an SMS from your registered mobile number to the UPS mobile number.

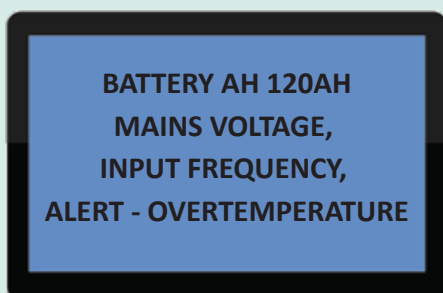
Monitoring

SMS STATUS from the registered mobile number and get instant SMS about the mains input voltage, output voltage, battery voltage, load current etc. Also receive SMS alert for pre-trip like battery low, overload and over temperature.



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

Portable wireless device.



Monitor from anywhere

Real time status,
Alert message with configurable alarm.

The portable wireless display can be used to monitor the UPS from anywhere. (Maintenance department, from home, practically from any part of the world).

Receive alert messgae with alarm (programmable) well in advance in order to initiate a preventice action; improving uptime and profitability.

Switch ON/OFF any machine remotely using mobile.

Remote ups monitoring software interface

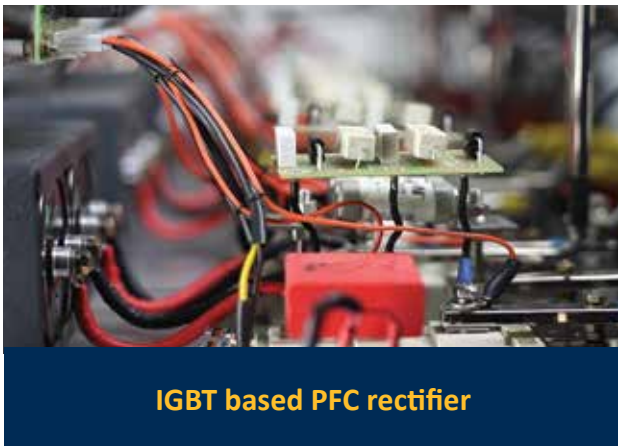
SNMP-simple network monitoring protocol



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.

100% Indigenous design



IGBT based PFC rectifier



**Industrial Grade
Designed for Harsh Environment**

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

- ★ CNC, laser cutting, wire EDM cutting etc
- ★ Process and Automation application
- ★ Data centres, IT, servers
- ★ Office, Hospitals, Educational institutes

- ★ MRI & CT scanners
- ★ Digital & offset printing
- ★ Analytical & research labs

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 301 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.



Optimise production process to improve Productivity and profitability...



Galvanic Isolation for Comprehensive Power Protection

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 only way 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.

Advanced Active Power PFC Online UPS

Technology

- ★ DSP technology IGBT inverter - IGBT converter

Interface

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

Features

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

Power Factor Corrections

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

Topology

- ★ Bifilar PWM switching

Ideal Power-conditioner

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

Technical Specifications

PFC 301

5KVA - 40KVA

TECHNOLOGY		DSP based, IGBT inverter-IGBT converter Online UPS.
RATING		5KVA - 40KVA
DC BUS		192VDC - 360VDC
INPUT		
Input Voltage		415VAC, 3Ø & N
Input Voltage Window		330VAC - 470VAC
Input Frequency		45-55Hz
Input PFC	100% load	> 0.95
Power walk in		Soft start for 0-20 seconds power walk-in.
RECTIFIER		
Type		IGBT based full bridge
Voltage Regulation (±) 1%		
Ripple Voltage		< 2%
Converter Protection		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		230VAC, 1Ø, P-N
Regulation		(±) 1%
Frequency		50 Hz ± 0.1Hz
Waveform		True Sinewave
Total Harmonic Distortion	Linear Load	< 2%
	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.		
BYPASS		
Manual Bypass		Provided
ALARMS		
LED Indications (Single LED with multi function)		<ul style="list-style-type: none"> • Input / Low / Fail • Output overload • Over temperature • Battery low
		<ul style="list-style-type: none"> • Mains on • UPS on • Battery Low • Overload
		<ul style="list-style-type: none"> • Input Voltage • Output Voltage • Load current • Output Frequency • Battery Voltage

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Service Network across India except Lakshadweep and Andaman Nicobar

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