

**PREMIER** 31 Series, 30kVA UPS System

General information:

<b>POWER (kVA)</b>		<b>30</b>
UPS typology		ON LINE – Double Conversion
Nominal output power @ P.F. 0.8	(kVA)	30
Nominal output power @ P.F. 1	(kW)	24
Efficiency AC ÷ AC	(%)	>90
Heat dissipation at nominal load and voltage	(kW)	2.67
	(kcal)	2296
UPS ambient temperature	(°C)	0 ~ +40
BATTERY ambient temperature	(°C)	0 ~ +25
UPS storage temperature	(°C)	-10 ~ +70
BATTERY storage temperature	(°C)	-10 ~ +60
Relative humidity non condensing	(%)	<95
Altitude	(m)	<1000 (Above See Level)
Power de-rating for altitude > 1000mt		According “EN50091-3”
Ventilation		FORCED
Requested cooling air volume	(m <sup>3</sup> /h)	800
Audible noise level (according EN 50091)		<58 dB
Protection degree		IP 20
Standard battery type lead acid	(N° cells)	192
Storage time of battery without recharge	(@ 25°C)	3 months
EMC Compatibility		According to “EN 50091-2” (CE Label)
Paint		RAL 9001
Accessibility		Front and top access for service
Static load without battery	(kg/m <sup>2</sup> )	655
Input/output cable connection		Bottom Side
Transport		Base provided for forklift handling
Transport mechanical stress		According to “EN50091-1”
Design standard		According to “EN50091-1”
Free contact interface		On request
Serial communication interface		RS232-RS485
Parallel configuration		To increase output power up to 6 UPS or 5+1 redundancy



Rectifier:

<b>POWER (kVA)</b>		<b>30</b>
Nominal Input Voltage	(Vac)	380 ~ 415 +/- 10% (Selectable)
Input Frequency	( Hz)	50 ~ 60 +/- 5%
Input Power Factor (@ 380Vac)		>0.8
DC Output Voltage Accuracy	(%)	+/- 1
DC Output Voltage Ripple (With battery connected)	(% rms)	< 2
Total harmonic distortion rejected into the mains	(%)	<30
Battery Recharging Characteristic		IU (DIN 41773)
Temperature Voltage Compensation		On Request
Maximum Recharging Current @ nominal load	(A)	10
Rectifier Bridge Type		Three Phase Full bridge rectifier
Input protection		Fast fuses
Nominal Current Absorbed from Mains (@ nominal load and Battery charge)	(A)	50
Maximum Current Absorbed from Mains (@ nom. load and max. recharging current)	(A)	60

Inverter:

<b>POWER (kVA)</b>	<b>30</b>
Inverter Bridge	IGBT (High Frequency Comm.)
Nominal Output Power @ P.F. 0.8 (kVA)	30
Nominal Output Power @ P.F. 1 (kW)	24
Nominal Output Voltage (Vac)	220 ~ 240 (Selectable)
Output Voltage Stability (%)	
- Static (Balanced Load)	+/- 1
- Dynamic (Step Load 0~100%~0)	+/- 8
- Output Volt. Recovery Time (after step load)	Within 40 msec
Output Frequency (Hz)	50 – 60 (Selectable)
Output Frequency Stability (Hz)	
- Free Running Quartz Oscillator	+/- 0.001
- Inverter Sync. with Mains	+/- 2 (Adjustable)
Nominal Output Current (A)	
- @ P.F. 0.8	130
- @ P.F. 1	104
Overload Capability (%)	125% for 10' 150% for 1' 200% for 100 ms
Short Circuit Current (A)	208
Short Circuit Characteristic	Elect. short circuit protection, current limited at 2 times nominal current
Selectivity	Within ½ cycle (Fuse gl 20% In)
Output Waveform	Sinusoidal
Output Harmonic Distortion (%)	
- Linear Load	<2
- Non Linear Load	<5
Crest Factor	3:1
Max. DC current absorbed from inverter during battery discharge (A) ( @ 320Vdc and NP)	81

## By-pass

Automatic Static By-Pass		Electronic Thyristor Switch
Nominal Voltage	(Vac)	220 ~ 240 (Selectable) +/-10%
Nominal Frequency	(Hz)	50 ~ 60 (Selectable) +/-5
Transfer Inverter ÷ Static By-Pass		In case of : -Test inverter -Inverter failure -Input inv. Volt. out of limit -Output inv. volt. out of limit
Retransfer Static By-Pass ÷ Inverter		Automatic or Manual (Selectable) Block on mains after 6 commutations in 2 minutes
Overload Capability		-150% Continuously -200% For 1 Minute -2000% For 1 Cycle
Manual By-Pass		With electric security and without interruption

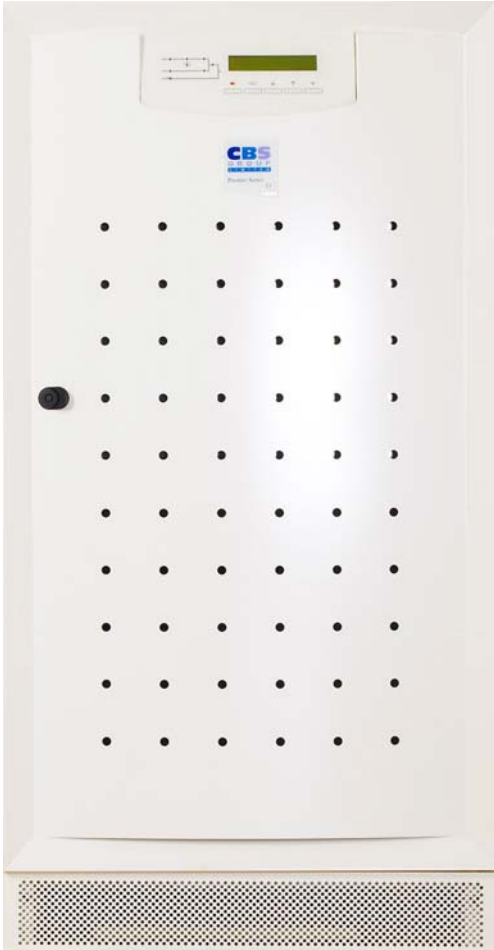
## Alarms, Controls and Signals:

On the "System control panel":

- Synoptic diagram showing: power flow, circuit breaker status and alarms
- Battery test indicator
- LCD display
- Keyboard

Options:

1. Free Contact Remote Alarms
2. SNMP Adaptor
3. Parallel Configuration
4. Battery Temperature Voltage Compensation



- ◇ Online double conversion technology
- ◇ Digital Signal Processor implementing full digital control
- ◇ High quality output power, provided under any condition of input power and loads
- ◇ Complete filtering of main power noise
- ◇ Stable output frequency, independent from input frequency
- ◇ Full access from the front and top for maintenance
- ◇ Up to 10 minutes autonomy with the internal batteries
- ◇ Integrated advanced self-diagnostic program
- ◇ Step-by-step procedures described on the LCD display for ease of use
- ◇ Results of electrical measurement, alarm, work condition, event log and battery state are displayed real time on the LCD front panel
- ◇ Mimic flow display to show the operating status of the UPS
- ◇ Battery test included as standard
- ◇ Parallel redundant configurations of up to six units

Dimensions:

690 Width, 870 Depth, 1350 Height (mm)

Weight UPS/UPS & battery:

349/650kg