

# TECHNICAL SPECIFICATION OF HIGHER RATING IPCL MODELS (10 to 100 kw)

MODELS		IPCL 10 kw	IPCL 15 kw	IPCL 20 kw	IPCL 25 kw	IPCL 30 kw	IPCL 40 kw	IPCL 50 kw	IPCL 60 kw	IPCL 80 kw	IPCL 100 kw	
<b>Parameters</b>	<b>Units</b>	<b>Rating</b>										
System Rating	KVA	10	15	20	25	30	40	50	60	80	100	
Operating DC Voltage	V	240					360					
Charging Voltage (Grid Mode)	V	260					390					
Charging Voltage (SPV Mode)	V	260					420					
Charging Current (Grid Mode)	A	2.5 - 10 (Adjustable)										
Charging Current (SPV Mode)	A	5 - 20										
<b>Photovoltaic Input</b>												
Input Voltage Range (Min-Max)	VDC	360 - 450					540 - 675					
Maximum PV Power recommended	KW	10	15	20	25	30	40	50	60	80	100	
Number of charge controller		1										
<b>MPPT Based charge controller</b>												
Priority		Solar / Grid / Batt.										
Switching Element		IGBT										
Controller		DSP										
Type of charger		PWM with MPPT										
Peak Efficiency	%	95										
<b>Input</b>												
Input Voltage	V	360V to 480V 3 Phase 4 Wire										
Frequency	Hz	50±10%										
Input Power factor	Lag	>0.9										
Charger Topology		BUCK										
Electrical Connections R Y B	Sq. m	6	6	6	8	10	16	16	20	25	35	
Neutral	Sq. mm	2.5										
<b>Output</b>												
Voltage	V	380 / 400 / 415 V 3 Phase 4 Wire										
Voltage Regulation	%	± 1										
Frequency	Hz	50										
Frequency Regulation	Hz	± 0.05										
Power Factor	Lag	0.8										
Waveform		Pure Sine Wave										
Transient Response	%	<8 (10% - 90% Linear Load)										
Voltage Harmonic	%	<3 (Linear Load)										
Overload Capacity	%	100 - 110% : 5 min; 110 - 120% : 2 min; 120 - 150 % : 30 sec;					150 - 200% : 1 Sec; 200 - 300% : 50 ms; >300% : 20 ms					
Crest Factor		3 : 1										
<b>Audible Warning</b>												
Battery Back-up Ending		Intermittent										
Overload		Continuous										
<b>Display</b>												
Switches		Reset for System On / Off # Scroll Switch										
LED		UPS on # Chg. On (spv / grid) # Overload (R, Y, B) # Output Low / High (R, Y, B) # Input Low / High (R, Y, B) # Batt. low / high										
LCD Display		Input Voltage & Frequency - R, Y, B # Output Voltage and equency - R, Y, B # Batt. Voltage # Load Level # Working Statu										
Interface		# Fault Status # SPV Voltage # SPV Current # SPV Power USB / Ethernet / SNMP (Optional)										
Protections		Verload, Batt. low/high, Output high/low (R, Y, B), Output Short Ckt, Overheat, Under / Over frequency, SOLar Panel reverse										
<b>Others</b>												
Battery Start		Standard										
Cabinet Wheels		Standard										
Extended Battery Charging		Optional										
<b>Overall</b>												
Peak Efficiency (AC-AC)	%	90										
Peak Efficiency (DC-AC)	%	92										
Transfer Time	ms	0										
Operating Temperature	*C	0 - 50										
Humidity	%	0 - 95 %										