

FIRSTLINE[®] PL

10 – 100 kVA

Three-Phase Double-Conversion On-Line UPS

- IGBT Rectifier
- Dual Input • Real Digital Signal Processor (DSP) controlled transformerless design
- Input Power Factor Correction PFC (>0.99)
- Low Total Harmonic Distortion Level (THDi δ 4%)
- High Efficiency (up to 95%)
- Wide Input Voltage Range
- Generator Compatible Operation
- Evolution and redundancy guaranteed by on site Modular Parallel Systems
- Intelligent battery management system extends the lifetime of batteries
- Synchronization Capability with external sources
- Static and Manual Bypass
- Communication with computers and network systems with SNMP availability
- Low installation and operating costs
- EPO (Emergency Power Off)

Options

- Optional Galvanic isolation transformer
- Remote Monitoring Panel
- Parallel Kit , Communication of parallel systems is made through CANBUS Parallel Card



Full Two Year
Warranty

**STACO
ENERGY[®]**
PRODUCTS CO.

Your tailored power solutions provider

Specifications—FirstLine® PL

	MODELS								
kVA	10	15	20	30	40	50	60	80	100
ELECTRICAL									
INPUT									
Phases	3P + N + G								
Nominal Voltage	08 Vac (480Vac with Optional Input Transformer)								
Frequency	60Hz ±10%								
Nom. Current (Amps)	26	40	53	79	105	131	158	211	263
Max. Current (Amps)	30	47	61	95	125	158	195	260	325
Power Factor	0.99								
OUTPUT									
Phases	3P + N + G								
Nom. Voltage	208 Vac (480Vac with Optional Output Transformer)								
Regulation	< 1%								
Frequency	60 Hz								
Free Running	±0.01%								
THD	<3%								
Kva	10	15	20	30	40	50	60	80	100
Power Factor	0.8								
kW	8	12	16	24	32	40	48	64	80
Nom. Current (Amps)	27.7	41.6	55.5	83.3	111.1	38.8	166.6	222.2	277.7
Crest Factor	3:1								
Overload Duration	>1 minute @ 150% Load								
Efficiency	2%								
STATIC BYPASS									
Phases	3P + N + G								
Voltage Range	±10%								
Frequency Range	47 – 53 Hz								
Nom. Current (Amps)	27.7	41.6	55.5	83.3	111.1	138.8	166.6	222.2	277.7
Transfer Time	0ms								
BATTERY									
Type	Sealed Maintenance Free, Lead Acid, VRLA								
Nom. Voltage	408Vdc Protection Deep Discharge								
Protection	with Auto Cut Off								
MIMIC DISPLAY									
LED	Line, Bypass, Battery, Inverter, Load, Fault Indication								
LCD	Load %, Input & Output Frequency, Voltage & Current, Bypass Voltage, Battery Voltage & Current, Temperature, Alarms								
MECHANICAL									
Enclosure	IP1 / NEMA 1								
Color	Black, Powder Coated								
Dimensions (Inches) (H x W x D)	44 x 16 x 31	44 x 16 x 31	52 x 21 x 35	52 x 21 x 35	61 x 27 x 29	54 x 25 x 39	67 x 31 x 30	74 x 38 x 35	74 x 38 x 35
Weight (lbs.)	242	242	529	530	617	650	728	816	838
ENVIRONMENTAL									
Storage Temp	-25 to 55°C								
Operating Temp	0 to +40°C								
Relative Humidity	0 to 90% (non condensing)								
Altitude	3,281 ft. without de-rating								
Protection Level	IP20								
Heat Loss BTU/HR	4,369	6,553	8,737	13,106	17,475	21,843	26,212	34,950	43,686
Noise Attenuation	65dBA @ 3 ft.		68dBA @ 3 ft.		70dBA @ 3 ft.		75dBA @ 3 ft.		
STANDARDS									
Agency	UL1778; C-UL								
EMI Classification	FCC Part 15, Class A								
Surge Protection	IEEE 587-B /ANSI C62.41-B								
COMMUNICATIONS									
Serial Communication	Serial Port – RS232 & RS422								
Contact Closures	AC failure, battery under voltage, bypass and output failure								
Digital Inputs	Two digital inputs for remote shut down of the UPS and generator operation feedback								
STANDARD FEATURES									
Input Connection	Dual								
Circuit Breaker	Input, Output and Manual Bypass Circuit Breakers								
Parallel	4 Modules for Capacity or Redundancy (No Parallel Cabinet)								
Battery test	Automatic and Manual								
OPTIONS									
Bypass	External 3 Breaker Make-Before-Break, with Interlocks								
Battery Cabinets	External Battery Cabinets for extended run times with built-in Battery Circuit Breaker Disconnect, Line Up and Match								
Remote Alarm Panel	Remote Alarm/Monitoring Panel								
SNMP Card	Internal SNMP/WEB Card and UPS Shutdown and Monitoring Software for Windows/Novell								
Software	LAN/WAN Network Communication Software								
Transformer	480Vac Input and Output Transformer (Auto or Isolation), Line Up and Match								
Seismic	IBC Seismic Restraint (Site Specific) Certification								
Special Enclosure	Complete system mounted and wired internal of any Harsh Environment enclosure with climate control (3R, NEMA 12, 4X)								



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