Q-RFL-2000

Output

Capacity (VA)	2000
Capacity (Watts)	1400
Current (peak amp) 120/130 VAC	18.2 / 8.7
Waveform	High resolution, pure sine wave
Outlets	4

Input

Current (max amp) (120/130 VAC)	20 / 10
Power factor	> .95
Frequency	50/60 Hz (auto) / 45/65 Hz
	(inverter phase lock range)

General

UPQ power conditioning topology	Five (5) Stages of Isolation and Conversion,
	High Frequency, True On-line digital sine wave
Desktop Configuration	No
Rack Mount Configuration	Yes

Voltage Regulation

Input voltage range:	
- Full load without using battery	North America 80 to 140 VAC
	International 165 to 270 VAC
- Half load without using battery	North America 75 to 140 VAC
	International 160 to 270 VAC
Output voltage regulation	± 2%

Isolation

Common-mode noise rejection	Yes
Normal-mode noise rejection	Yes

Suppression

IEEE 587/ANSI 62.41 3KA/6KV	170 V normal mode (L or N) /
	230 V common mode (L+N to G)
surge let-through (NA)	
IEEE 587/ANSI 62.41 3KA/6KV	340 V normal mode (L or N) /
	450 V common mode (L+N to G)
surge let-through (international)	
Joules (energy absorption)	300 Joules
Peak surge current (amp)	80,000 Amps

Multi-stage protection	Yes
Normal & common mode certified	Yes
Conditioning	Yes
Output total harmonic distortion	Less than 3% under linear load,
	less than 5% under non-linear load
Output freqeuncy range	50/60 Hz ± 0.1 Hz (except the
	synchronization to line during brownout)
Input Frequency range	45-65 Hz

High Frequency On-Line Inverter

Inverter driver frequency	50 KHz
Overload capacity	>110% continuous
Crest Factor	3:01
Transfer Time	Zero
Efficiency	85% Min
UPQ to bypass/bypass to UPQ	Zero cross transfer, less than 4 ms
	(2 ms minimum)

Battery

Full load run time	> 5 min
Half load run time	> 15 min
DC voltage	72 VDC
Recharge time	5 to 8 hours
Recharge current (amps)	1.5
Internal to the unit	No
Modular battery packs	Yes
Extended battery packs	Yes
Hot-swappable	Yes
Front panel removal	Yes

Power Connector

Input of 120V / 230V units	IEC
Output of 120V units (Standard)	(4x) Nema
Output of 120V units (Option 1)	(4x) IEC
Output of 120V units (Option 2)	(4x) Nema
Output of 230V units (Standard)	(4x) IEC
Output of 230V units (Option 1)	(4x) Nema
Ouput of 230V units (Option 2)	(4x) IEC
Nema with Branch Bank Protection	Yes
IEC with Branch Bank Protection	Yes
L5 with Branch Bank Protection	No
L6 with Branch Bank Protection	No

Physical

WxDxH	19 x 17.5 x 3.5 in (48.3 x 44.5 x 8.9 cm)
Weight in lbs/kg	33 lbs / 15 kg
UPQ size	2 U
Weight includes internal battery	No
Battery size WxDxH	19.3 x 21 x 3.5 in (49 x 53.3 x 8.9 cm)
Battery size	2 U
Battery Pack in lbs/kg	50 lbs / 22.7 kg

Battery Charger

Microprocessor controller	Yes
Expansion	Yes
Extended pack option	Yes
Connect/disconnect	Yes

Front Panel Display

System status information	Yes
Inverter status	Yes
Bypass status	Yes
Load status	5 segment
Battery status	5 segment
Diagnostic status	Yes

Diagnostics

POST	Yes
Bypass	Yes
Line to output sync	Yes
Battery status	Yes
Inverter error	Yes
AC input failure	Yes
Overload	Yes

Monitoring

Remote shutdown	Yes
Remote diagnostics	Yes
Scheduled shutdown	Yes
Input voltage	Yes
Input frequency	Yes
Output voltage	Yes
Ouput frequency	Yes
Output Load	Yes

Reporting	Yes
Graphicing	Yes
Plotting	Yes

Auto Restart (Input Voltage)

110 / 120 VAC	>90 - 120 VAC
220 VAC	>100 - 200 VAC

DC Startup

DC Startup	Yes

Environment

Audible noise	< 50 dBA at 1 meter
Temperature (MIL-STD-810)	-22° to 140° F (-30° to 60° C)
Relative humidity (MIL-STD-810)	0 to 95% non-condensing

Approvals

UL	Compliant
UL medical	Compliant
TUV	Compliant
CE and CE medical	Yes

Warranty

Warranty	1 year parts and labor

Protection

Overload	> 100% full load / 15-20 sec delay
Over/under voltage at I/P , O/P	Inverter shutdown protection
Short circuit	Yes
Over temperature	Yes