

Uninterruptible Power Supply

Spring

The SPRING series includes Tower, Rack and Dual (tower and rack) models from 500VA to 3000VA and uses sinewave digital technology. The SPRING range, with its advanced communications and connectivity options, is the ideal solution for the most demanding of customers looking for superior protection and versatility. SPRING is the best protection for network devices, rack mounted servers, conventional rack-mounted or tower servers, network storage systems.

Very High Protection

The Automatic Voltage Regulation provides stabilisation from brownouts, sag and surge voltages without making use of the batteries. Less frequent usage of the batteries means thet they will be fully charged when really needed and last longer. EMI filters then provide further protection from spikes and transients. When the mains power supply fails, the load is powered by the inverter and receives a true SINEWAVE supply for maximum power continuity and reliability. The UPS also incorporates a protection for PC and network, telephone line/modem connections (RJ45-RJ11).

High Availability

Powershare output socket provides the load-shedding of the least critical load to maximise the back up time of the most critical servers. Hot Swappable battery from the front of the UPS allows easy and no-risks maintenance of the UPS. Additional Battery Box and extended charging current are available in Spring 2200RT and 3000RT for very long back up time applications. Predictive battery testing to spot potential battery deterioration and failure. Deep discharge protection to reduce overall battery aging.

Versatility

Spring Dual (DVD1500, 2200 and 3000) can be placed directly onto the floor or mounted in 19" rack mount cabinets. The front panel digital display can be easily pulled out and rotated to suit the installation format. Spring R and RT versions includes Emergency Power Off switch, which allows to shutdown the output power in case of emergency situations. Cold start function enables Spring to start up when power network is not available.

Advance Communication

- Advanced, multi-platform communication for all operating systems and network environments: Watch&Save 3000 monitoring and shut-down software included, with SNMP agent, for Windows 95, 98, NT 4.0, Me, 2000, 2003, XP, Mac OS 9.x, X, Linux, Novell and many other popular operating systems - USB or RS232 serial port (selectable) - Slot-in SNMP network adapter card -



LCD display provides information concerning alarms, status and measure of the major electrical parameters of input, output and battery.

Applications

Personal computer, small computer networks, Local Area Networks (LAN), workstations, servers, EPOS (Electronic Point Of Sales) system.



Uninterruptible Power Supply

INPUT	S 500T	S 800T	S 1100T	S 1500T	
Voltage		230	V		
Voltage range without battery contribution		160V ±3%; 2	294V ±3%		
Frequency	50/60Hz autoselection				
Accepted frequency	± 5%				
Input phases	1				
BATTERIES	S 500T S 800T S 1100T S 1500T				
Туре	Lead, open vase acid and VRLA AGM / GEL; NiCd				
Battery blocks	12V/9Ah	12V/7Ah	12V/9Ah	12V/7Ah	
Batteries number	1	2		4	
Recharge time	less than 6 hours at 90%				
ОИТРИТ	S 500T	S 800T	S 1100T	S 1500T	
Rated power	500 VA	800 VA	1100 VA	1500 VA	
Active power	350W	540W	740W	1050W	
Phases number		1			
Waveform		Pure sine	ewave		
Rated voltage (on battery opration)		230V changeable by softwa	are at 200/208/220/240V		
Rated voltage (on mains operation)	230V (±5%)				
Frequency	50/60Hz autoselection				
Overload		>110% for 3 minutes	; >150% 800msec.		
Output sockets		3 IEC 320 (10A) + 1 IEC	320 (10A) Powershare		
SYSTEM	S 500T	S 800T	S 1100T	S 1500T	
Transfer time		4 msec.typical;	6 msec. max.		
AC/AC efficiency		98%	%		
Noise		< 50d	lbA		
Operating temperature		0°C ÷ 4	40°C		
Relative humidity		< 90	%		
Safety compliance	EN 62040-1-1 and Directives 73/23/EC, 93/68/EC				
EMC conformance		EN 62040-1-1 and Directiv	Ves 73/23/LC, 93/00/LC		
		EN 62040-1-1 and Directive EN 62040-2 and Directive EN 62040-2 and Directive EN 62040-2 and Directive EN 62040-2 and Directive EN 62040-1 and Directive EN 62040-2 and Dire			
Protections	Excessive d		ctives 2004/108/EC	age-thermal	
	Excessive d	EN 62040-2 and Direc	ctives 2004/108/EC nort circuit-overvoltage-undervolt	age-thermal	
Net/telephone line protection		EN 62040-2 and Direct lischarge of batteries-overcurrent-shape of batteries (Section 2016).	ctives 2004/108/EC nort circuit-overvoltage-undervolt ered socket		
Net/telephone line protection Communication		EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt	ctives 2004/108/EC nort circuit-overvoltage-undervolt iered socket n slot (E.P.O. 2200RT/3000T mo		
Net/telephone line protection Communication Colour		EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt is, RS232, Communication expansion	ctives 2004/108/EC nort circuit-overvoltage-undervolt lered socket n slot (E.P.O. 2200RT/3000T mo		
Net/telephone line protection Communication Colour Technology		EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt is, RS232, Communication expansion RAL 7024 (c	ctives 2004/108/EC nort circuit-overvoltage-undervolt ered socket n slot (E.P.O. 2200RT/3000T modark grey) ractive		
Net/telephone line protection Communication Colour Technology Weight (kg)	USB	EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt it, RS232, Communication expansion RAL 7024 (c	ctives 2004/108/EC nort circuit-overvoltage-undervolt ered socket n slot (E.P.O. 2200RT/3000T modark grey) ractive	odels)	
Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm	USB	EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt is, RS232, Communication expansion RAL 7024 (c Line Interest)	ctives 2004/108/EC nort circuit-overvoltage-undervolt ered socket n slot (E.P.O. 2200RT/3000T modark grey) ractive	odels) 18 Kg	
Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm	USB 7 Kg	EN 62040-2 and Direct Elischarge of batteries-overcurrent-sh RJ45/RJ11 filt is, RS232, Communication expansion RAL 7024 (c Line Interior Line Interior L11 is 110x383x235 mm	ctives 2004/108/EC nort circuit-overvoltage-undervolt ered socket n slot (E.P.O. 2200RT/3000T modark grey) ractive Kg S 1100T	18 Kg 160x425x235 mm	
Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm DATA Back up time at full load (min)	USB 7 Kg	EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt is, RS232, Communication expansion RAL 7024 (c Line Interest) 11 k 110x383x235 mm	ctives 2004/108/EC nort circuit-overvoltage-undervolt lered socket n slot (E.P.O. 2200RT/3000T mod dark grey) ractive Kg S 1100T in.	18 Kg 160x425x235 mm	
Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm DATA Back up time at full load (min) Installation	USB 7 Kg	EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt is, RS232, Communication expansion RAL 7024 (c Line Intel 11 k 110x383x235 mm S 800T	ctives 2004/108/EC nort circuit-overvoltage-undervoltage-	18 Kg 160x425x235 mm	
Protections Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm DATA Back up time at full load (min) Installation Configuration OPTIONS	USB 7 Kg	EN 62040-2 and Direct lischarge of batteries-overcurrent-sh RJ45/RJ11 filt it, RS232, Communication expansion RAL 7024 (c Line Interior In	ctives 2004/108/EC nort circuit-overvoltage-undervoltage-	18 Kg 160x425x235 mm	



LCD-based remote control panel	yes yes				
Communication software 'professional' version					
OPTIONS	S 500T	S 800T	S 1100T	S 1500T	
MultiCom 351	Х	Х	Х	Х	
MultiCom 352	Х	X	Х	X	
MultiCom 301	Х	X	Х	X	
MultiCom 302	Х	X	Х	Х	
NetMan 101 Plus	Х	X	Х	X	
NetMan 102 Plus	Х	X	Х	Х	
MultiCom 362	Х	Х	Х	Х	
MultiCom 372	Х	X	Х	Х	
MultiCom 382	Х	X	Х	X	
Multi I/O	Х	X	Х	X	
IRMS Multi-Switch	Х	X	Х	Х	
AS/400 interface kit	Х	X	Х	Х	
External by-pass cabinet rack 16A	Х	Х	Х	Х	
Profibus DP Gateway	X	Х	X	Х	



INPUT	S 2000T	S 2200RT	S 3000RT			
Voltage		230V				
Voltage range without battery contribution		160V ±3%; 294V ±3%				
Frequency	50/60Hz autoselection					
Accepted frequency	± 5%					
Input phases	1					
BATTERIES	S 2000T S 2200RT S 3000RT					
Туре	Lead,	Lead, open vase acid and VRLA AGM / GEL; NiCd				
Battery blocks	12V/9Ah 12V/5Ah					
Batteries number	4 8					
Recharge time	less than 6 hours at 90%					
OUTPUT	S 2000T	S 2200RT	S 3000RT			
Rated power	2000 VA	2200 VA	3000 VA			
Active power	1350W	1540W	2100W			
Phases number		1				
Waveform		Pure sinewave				
Rated voltage (on battery opration)	230V	230V changeable by software at 200/208/220/240V				
Rated voltage (on mains operation)		230V (±5%)				
Frequency		50/60Hz autoselection				
Overload		>110% for 3 minutes; >150% 800msec.				
Output sockets	3 IEC 320 (10A) + 1 IEC 320 (10A) Powersh	1 IEC 320 (16A) + 7 IEC 320 (10	A) + 1 IEC 320 (10A) Powershare			
SYSTEM	S 2000T	S 2200RT	S 3000RT			
Transfer time		4 msec.typical; 6 msec. max.				
AC/AC efficiency		98%				
Noise		< 50dbA				
Operating temperature		0°C ÷ 40°C				
Relative humidity		< 90%				
Safety compliance	EN 62040-1-1 and Directives 73/23/EC, 93/68/EC					
	EN 62040-2 and Directives 2004/108/EC					
EMC conformance						
EMC conformance Protections						
		EN 62040-2 and Directives 2004/108/EC				
Protections	Excessive discharge of ba	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvolta	age-undervoltage-thermal			
Protections Net/telephone line protection	Excessive discharge of ba	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvolta RJ45/RJ11 filtered socket	age-undervoltage-thermal			
Protections Net/telephone line protection Communication	Excessive discharge of ba	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvolta RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 22001)	age-undervoltage-thermal			
Protections Net/telephone line protection Communication Colour	Excessive discharge of ba	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvolta RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 22001 RAL 7024 (dark grey)	age-undervoltage-thermal			
Protections Net/telephone line protection Communication Colour Technology	Excessive discharge of ba	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvoltal RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 22001) RAL 7024 (dark grey) Line Interactive 31 Kg	age-undervoltage-thermal RT/3000T models)			
Protections Net/telephone line protection Communication Colour Technology Weight (kg)	Excessive discharge of ba	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvoltal RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 22001) RAL 7024 (dark grey) Line Interactive 31 Kg	age-undervoltage-thermal RT/3000T models) 32 Kg			
Protections Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm	USB, RS232, Com 18 Kg 160x425x235 mm	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvoltate RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 22001 RAL 7024 (dark grey) Line Interactive 31 Kg 88x582	age-undervoltage-thermal RT/3000T models) 32 Kg x438 mm			
Protections Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm	USB, RS232, Com 18 Kg 160x425x235 mm	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvoltal RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 22001 RAL 7024 (dark grey) Line Interactive 31 Kg 88x582: S 2200RT	age-undervoltage-thermal RT/3000T models) 32 Kg x438 mm			
Protections Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm DATA Back up time at full load (min)	USB, RS232, Com 18 Kg 160x425x235 mm	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvolta RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 2200) RAL 7024 (dark grey) Line Interactive 31 Kg 88x582: S 2200RT 6 min.	age-undervoltage-thermal RT/3000T models) 32 Kg x438 mm			
Protections Net/telephone line protection Communication Colour Technology Weight (kg) Dimensions (WxDxH) mm DATA Back up time at full load (min) Installation	USB, RS232, Com 18 Kg 160x425x235 mm	EN 62040-2 and Directives 2004/108/EC atteries-overcurrent-short circuit-overvolta RJ45/RJ11 filtered socket amunication expansion slot (E.P.O. 22001) RAL 7024 (dark grey) Line Interactive 31 Kg 88x582: S 2200RT 6 min. Tower	age-undervoltage-thermal RT/3000T models) 32 Kg x438 mm			



LCD-based remote control panel	yes yes			
Communication software 'professional' version				
OPTIONS	S 2000T	S 2200RT	S 3000RT	
MultiCom 351	Х	X	Х	
MultiCom 352	Х	X	X	
MultiCom 301	Х	X	X	
MultiCom 302	Х	X	X	
NetMan 101 Plus	Х	X	X	
NetMan 102 Plus	Х	X	X	
MultiCom 362	X	X	Х	
MultiCom 372	Х	X	X	
MultiCom 382	Х	X	X	
Multi I/O	Х	X	Х	
IRMS Multi-Switch	Х	X	X	
AS/400 interface kit	Х	X	Х	
External by-pass cabinet rack 16A	Х	X	Х	
Profibus DP Gateway	Х	X	Х	