



Smart Ferro Resonant Series

1- Introduction of Product

Faratel Smart Ferroresonant UPS series are designed with Ferroresonant technology and can provide pure sine wave in output independent from input AC line even in power failure.

Faratel SFR series are equipped with smart micro-processing system to check for proper operation of UPS and find probable errors in any part of the UPS.

SFR UPS series are designed for Computer systems, sensitive measurement instruments, laboratory precision instruments, medical devices, Telecommunication or any other power sensitive devices.

1-1- Advance Features

- Ability to remove EMI and RFI Noises
- Power Factor Correction
- System modulated for better and easy Servicing
- Equipped with External Battery Connector
- Includes Switch mode Charger
- Equipped with Smart RS232 Port
- Includes UPSwing Pro software to control and monitor UPS, auto save open files and shutdown OS and UPS in critical events
- Includes Test Button for checking if UPS working properly in lack of AC line Voltage
- Intelligent Microprocessor controlled
- Cold Start
- Automatically Battery Charging in UPS off mode
- Ability to add UPS Device Managers as SNMP Cards (Optional)

1-2- Protection Systems

- Protection of UPS loads against lightning, spike and surge
- Spike protection and reduction in scale of 2000V:1
- Back Feed Protection on Battery Mode
- Protection of UPS loads against two phased Input AC line
- Protection against output voltage variations out of range
- Protection against Input voltage and frequency variations
- Over Heat protection
- Common Mode Noise protection
- Output short circuit and overload protection
- Reversed Battery connection protection
- Charger short circuit protection
- Battery Terminal short circuit protection
- Protection against over-discharge
- Protection against upper battery charger voltage
- Tel/Fax/Modem/Network Surge Suppression

2- UPS Block Diagram

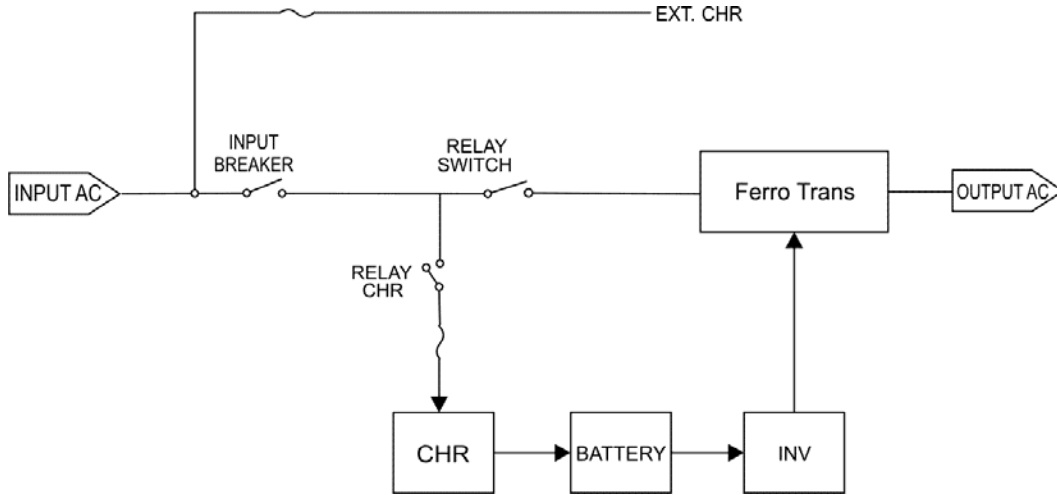


Figure1: Block Diagram of SFR-UPS Series

3- Front Panel View

- 1- TEST/MUTE Button
- 2- OUTPUT Indicator
- 3- AC IN Indicator
- 4- Charger Indicator
- 5- Low Battery Indicator
- 6- Inverter Indicator
- 7- Over Load Indicator
- 8- Fault Indicator
- 9- Load Level Indicators
- 10- Battery Level Indicators

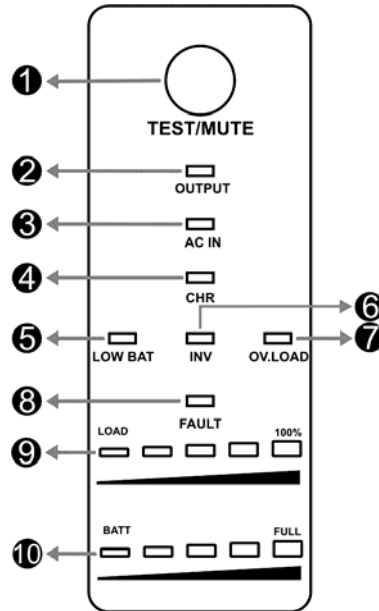


Figure 2: Front Panel of SFR-UPS Series

4- Rear Panel View

- | | |
|--|---|
| 1- Input AC Line Cable/Terminal | 9- Receptacle for Charger of External Battery |
| 2- Input Fuse/ Breaker | 10- Input Fuse for Charger of External Battery |
| 3- Earth Connection Screw | 11- Smart RS232 Port |
| 4- Site Wiring Fault Indicator | 12- Intelligent Card Slot |
| 5- Output Receptacles/Terminal | 13- Modem/Network Surge Protection (RJ45/11 connection) |
| 6- Special Fuse for Output Receptacles | 14- Fans |
| 7- External Battery Connector | 15- On/Off Breaker |
| 8- Battery Fuse | 16- Terminal Cables Keeper |

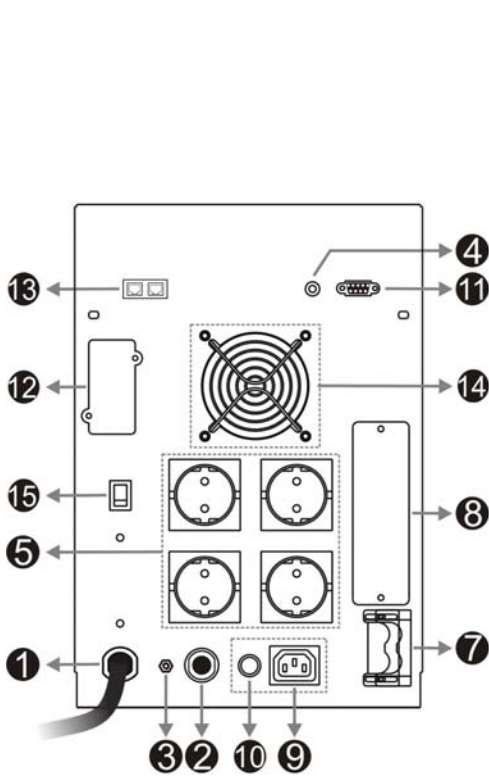


Figure 3: Rear Panel of SFR3000-DT

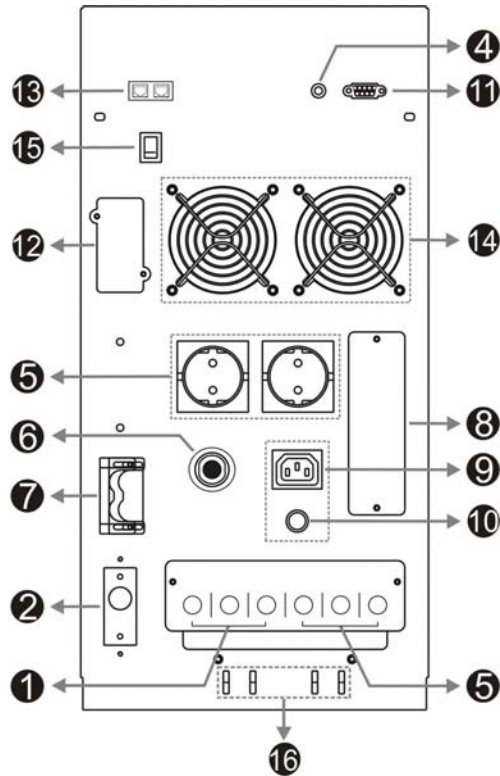


Figure 4: Rear Panel of SFR5000-DT

6- Backup time chart

UPS Model	UPS Power (VA)	Battery Cabinet	Load/Backup time (Minutes)						
			20%	40%	50%	60%	70%	80%	Full
SFR1000	1000	SBC2428	105	62	51	41	31	27	20
		SBC2442	170	102	84	70	52	45	33
		SBC24100	450	290	240	200	150	130	102
SFR1500	1500	SBC2428	72	43	36	29	22	20	15
		SBC2442	108	65	55	45	34	29	22
		SBC24100	297	192	150	133	100	90	71
SFR2000	2000	SBC2428	43	28	22	18	14	12	9
		SBC2442	73	44	37	31	24	21	16
		SBC24100	218	141	117	98	74	66	53
SFR3000	3000	SBC4828	93	58	39	30	24	21	17
		SBC4842	167	96	61	49	43	38	30
		SBC4865	283	160	104	81	69	60	49
		SBC48100	448	251	170	134	105	92	75
SFR5000	5000	SBC4828	50	29	22	15	12	10	7
		SBC4842	82	50	38	25	22	18	13
		SBC4865	140	87	65	47	40	34	25
		SBC48100	215	144	120	90	71	60	47

Note: The tolerance of time values in above table is $\pm 10\%$.

7- How to Contact Faratel

7-1- Central Sales Department

Address: Faratel Bldg., No. 21, Kandovan Alley (Opposite of Nejatolahi St.), Enqelab St., Tehran, Iran

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7-2- Central Customer Service

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In order to find the nearest authorized representatives of Customer Service in Iran please refer to the above URL.