Aytemiz MAKELSAN
Uninterruptible Power Supplies/Generator

POWER FORLIFE

HF S SERIES MINI

ON-LINE UPS

6-10 kVA 1:1 PHASE
10 kVA 3:3 PHASE 3:1 PHASE



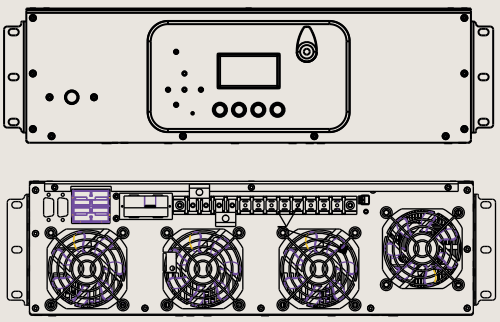
- BOXER S RM Mini Model
- High Frequency and True Double Conversion Technology
- DSP (Digital Signal Processor) Technology
- Input Power Factor Correction (PFC)
- Output Power Factor 0.9
- Ups/Rack Mount 19” 3U

DATA CENETR | MEDICAL | INDUSTRY | TRANSPORT | EMERGENCY



VFI TYPE ON-LINE UPS | PF 0.9 POWER FACTOR | RACK | 24M SERVICE

- Cold Start (Optional)
- Automatic Frequency Detection
- ECO Mode Operation for Energy Saving
- Selectable Output Voltage via LCD
- 50Hz/60Hz Frequency Converter Mode Available
- Low Battery Voltage Selectable via LCD
- Self-Test at Startup
- Advanced Battery Management (ABM)
- Short-Circuit and Overload Protection
- Automatic Battery Charging in Off Mode
- Automatic Fan Speed Control Based on Load Changes
- Generator Compatibility
- Emergency Power Off (EPO)
- Standard RS232 Communication port
- SNMP Communication Port (Optional)
- External Battery Group (Optional)



TSE TSE-HYB CE

MODEL		HF S SERIES (BOXER S RM MINI MODEL)	
Capacity		6kVA	10kVA
INPUT			
Connected Voltage		380/400/415VAC 3P+N+PE Opsiyonel(220/230/240VAC1P+N+PE), (380VAC/220VAC-18%+15%)	
Frequency Range		45 ~ 65Hz	
Power Factör		≥0,99	
Harmonic Distortion		≤3% (On Fully Non-Linear Load)	
ECO Range		Maximum voltage values are 220V: +25% (optional: +10%, +15%, +20%), 230V: +20% (optional: +10%, +15%), and 240V: +15% (optional: +10%), while the minimum voltage is -45% (optional: -20%, -30%).	
Generator		Compatible	
OUTPUT			
Voltage Range		380/400/415VAC 3P+N ± 1% Optional(220/230/240VAC ± 1% 1P+N)	
Power Factor		0.9	
Voltage Regulation		± 1% Static, ± 3% Dynamic	
Frequency	AC Mod	±1%, ±2% , ±4%, ±5%, ±10% (Optional)	
	Battery Mod	50/60 ±0,1hz	
Waveform		Pure Sine Wave	
Crest Factor		3:1	
Harmonic Distortion		≤2% (Linear Load), ≤5% (Non-Linear Load)	
Transfer Time		From Battery Mode to Inverter Mode: 0 ms, From Inverter Mode to Bypass Mode: 0 ms	
Output Dynamic Tolerance		At 100% load: ±5%	
Overload Capacity	AC Mod	≤110%: 60 min; ≤125%: 10 min; ≤150%: 1 min; ≥150%: immediate switch to Bypass Mode	
	Battery Mod	>%150: Bypass Mode	
Parallel Operation		Optional	
BYPASS(STATIC)			
Voltage		380/400/415VAC 3P+N Optional(220/230/240VAC 1P+N)	
Voltage Tolerance		±15% (configurable within the ±1% – ±25% range)	
Bypass Overload		≤150%: 10 min; ≤200%: 1 min; >200%: immediate protection activation	
Frequency Tolerance		±5% (configurable in the range of ±1% – ±25%)	
EFFICIENCY			
AC Mod		93,5%	
Battery Mod		92,5%	
ECO Mod		98%	
BATTERY			
DC Voltage		192~480 VDC	
External Battery		16-40(+1 expandable)	
Charging Current		5A	
Average Charging Time		8 hour	
PROTECTION			
Full Protection		Overload, Short Circuit and Battery Charge-Discharge Protection, RFI/EMI Filter	
SYSTEM FEATURES			
Charging Current		Intelligent Charging System	
Overtemperature		Mains Mode: Switches to bypass; Battery Mode: Immediately shuts down UPS	
Intelligent Alarm System		Mains Failure, Low Battery, Overload, System Fault, Overtemperature	
LED and LCD Monitor		Mains Mode, Battery Mode, Bypass Mode, Low Battery, Overload & UPS Fault, Overtemperature	
ALARM			
Mains Failure		Mains Mode, Low Battery, Overload, System Fault	
Low Battery		Alarm and Shutdown	
Overload		Overload	
UPS Fault		System Fault	
ENVIRONMENTAL			
Operating Temperature		0°C ~ 40°C	
Storage Temperature		-25°C ~ 55°C	
Protection Class		IP20	
Humidity		0% ~ 90%	
Altitude		<1500 m	
Noise Level		<50 dB	
COMMUNICATION			
Communication Interface		Standart (RS232), Optional (RS485, Paralel Port, Dry Contact, SNMP, Cold Start)	
Software		SEC, TELNET	
Emergency Power Off (EPO)		Standart	
STANDARD			
Quality Certificates		ISO 9001, ISO 14001, ISO 45001, ISO10002, CE, TSE, TSE HYB	
LVD/Safety		IEC/EN62040-1	
EMC		IEC/EN 62040-2	
DIMENSIONS & WEIGHT			
Dimensions W×D×H (mm)		440 x 585 x 133	
Net Weight (kg)		28	

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