



• DATA CENTER • • TRANSPORT • • MALLS •

MTW150 MODULAR UPS

UNINTERRUPTIBLE POWER SUPPLIES

10-150kVA

3P/3P, 3P/1P, 1P/1P, ONLINE DOUBLE CONVERSION

➔ FLEXIBLE CONFIGURATION

➔ SMART SLEEP FUNCTION

➔ GRAPHIC LCD DISPLAY



MODULAR UPS



UPS ONLINE



POWER FACTOR



USB



SERVICE / TECH. SUPPORT



GENERAL SPECIFICATIONS

RACK MODULAR DESIGN

Modular design, compatible with 19" standard rack cabinet, convenient to be integrated with servers.

FLEXIBLE CONFIGURATION

The system can be configured to 3/3, 3/1 and 1/1

HIGH POWER DENSITY

Extreme high power density, 25kW in 2U, friendly for space and maintenance.



INTELLIGENT CHARGING MANAGEMENT

The system intelligently control the whole process of the charging and discharging, effectively improving the life time of the battery.

CHARGING FLEXIBILITY

Supports supercharging, Compatible with both Lead acid and Lithium batteries

FRIENDLY INTERFACE

7 inch touch LCD, with IoT functions.

SMART SLEEP FUNCTION

System can intelligently shutdown some power modules to increase total load rate, achieving higher efficiency.

HIGHLY RELIABLE AND ADAPTABLE

High reliability and environment adaptability, with protection of components level, also supporting battery connection without Neutral.



TECHNICAL SPECIFICATIONS

MODEL	MTW20/10X1	MTW40/10X1	MTW60/10X1	MTW30/15X1	MTW60/15X1	MTW90/15X1	
Rated power	20kVA/20kW	40kVA/40kW	60kVA/60kW	30kVA/30kW	60kVA/60kW	90kVA/90kW	
Power module capacity	TPW10			TPW15			
INPUT							
Input	3P+N+PE, L+N+PE						
Rate voltage	3-Phase input: 380/400/415VAC (L-L); 1-Phase input: 220/230/240VAC (L-N)						
Input power factor	> 0.99						
Current distortion	THDi < 2% (100% Linear load)						
Voltage range	3-Phase input: 304 ~ 478VAC (L-L) full load 304 ~ 228VAC (L-L) power derate from 100% to 75% 1-Phase input: 176 ~ 276VAC (L-L) full load 176 ~ 132VAC (L-L) power derate from 100% to 75%						
Frequency range	40-70Hz						
BATTERY							
Rate voltage	20-44 batteries 3 wires (standard) / 2 wires (optional)			32-44 batteries settable 30~32 batteries, UPS PF derate to 0.8 34 batteries, UPS PF derate to 0.9 36~50 batteries, UPS PF is 1.0 3 wires (standard) ± 240VDC / 2 wires (optional) 480VDC			
Charging capacity	Max 100%*Pout (Limited by input current)						
Charge accuracy	± 1%						
BYPASS							
Rate voltage	3-Phase input: 380/400/415VAC (L-L); 1-Phase input: 220/230/240VAC (L-N)						
Voltage range	Range: -40%- +25%, Settable, default -20% +15%						
Frequency range	Settable (±1Hz, ±3Hz, ±5Hz)						
Overload	110% long time operation, 110% <load<125% 5 mins, 125% <load<150%, 1 min, >150% 1 second						
INVERTER							
Rate voltage	3-Phase output: 380/400/415VAC (L-L), 1-Phase output: 220/230/240 (L-N)						
Rate frequency	50Hz / 60Hz						
Output power factor	1						
Voltage accuracy	± 1.0%						
Load response	< 5% (20% - 80% -20% step load)						
Recovery time	< 20ms (0% - 100% -0% step load)						
Output THDv	< 1% (linear load), < 5% (non-linear load according to IEC 62040-3)						
Overload	110%, 1 hour; 125%, 10 mins; 150%, 1 min; >150%, 200ms						
Frequency accuracy	0.1%						
Synchronize window	Settable, ± 0.5Hz ~ ± 5%Hz, default ± 3Hz						
Slew rate	Settable, ± 0.5Hz/S ~ ± 3%Hz/S, default ± 0.5Hz/S						
Crest factor	3:1						
Phase accuracy	120° ± 0.5°						
SYSTEM							
Efficiency - Normal mode	> 96.5%						
Efficiency - Battery mode	up to 95.3%			up to 95.5%			
Display	LED + 7 inch touch LCD						
Certification - Safety	IEC62040-1, IEC60950-1						
Certification - EMS	IEC62040-2, IEC60950-4-2 (ESD); IEC61000-4-3 (RS); IEC61000-4-4 (EFT); IEC61000-4-5 (Surge)						
IP degree	IP20						
Noise (dB) (1 meter)	62dB @ 100% load, 58dB @ 45% load						
Operation temperature	0-40°C						
Humidity	0-95% (non condensing)						
Altitude	<1000m, 1000 ~ 2000m, Power derates 1% every 100m						
Configuration	USB, RS232, RS485, Dry contact, Cold start						
Option	SNMP card, AS400 card, Parallel kit, LBS, Air filter						
Dimension (HxWxD) mm	Cabinet	307x442x711	485x442x711	976x442x660	307x442x711	797x442x660	976x442x660
	Cabinet (Wheels not included)			883x442x660		705x442x660	883x442x660
	Module			86x400x495 (2U)			
Weight (kg)	Cabinet	39	52	88	39	64	88
	Module	12	14	16	12	14	16

TECHNICAL SPECIFICATIONS

MODEL	MTW40/20X1	MTW80/20X1	MTW120/20X1	MTW50/25X1	MTW100/25X1	MTW150/25X1	
Rated power	40kVA/40kW	80kVA/80kW	120kVA/120kW	50kVA/50kW	100kVA/100kW	150kVA/150kW	
Power module capacity	TPW20			TPW25			
INPUT							
Input	3P+N+PE, L+N+PE						
Rate voltage	3-Phase input: 380/400/415VAC (L-L); 1-Phase input: 220/230/240VAC (L-N)						
Input power factor	> 0.99						
Current distortion	THDi < 2% (100% Linear load)						
Voltage range	3-Phase input: 304 ~ 478VAC (L-L) full load 304 ~ 228VAC (L-L) power derate from 100% to 75% 1-Phase input: 176 ~ 276VAC(L-L)full load 176 ~ 132VAC (L-L) power derate from 100% to 75%						
Frequency range	40-70Hz						
BATTERY							
Voltage	32~44 batteries settable 30~32 batteries, UPS PF derate to 0.8 34 batteries, UPS PF derate to 0.9 36~50 batteries, UPS PF is 1.0 3 wires (standard) ± 240VDC / 2 wires (optional) 480VDC						
Charging capacity	Max 100%*Pout (Limited by input current)						
Charge accuracy	± 1%						
BYPASS							
Rate voltage	3-Phase input: 380/400/415VAC (L-L), 1-Phase input: 220/230/240 (L-N)						
Voltage range	Range: -40%- +25%, Settable, default -20% +15%						
Frequency range	Settable (±1Hz, ±3Hz, ±5Hz)						
Overload	110% long time operation, 110% <load<125% 5 mins, 125% <load<150%, 1 min, >150% 1 second						
INVERTER							
Rate voltage	3-Phase output: 380/400/415VAC (L-L); 1-Phase output: 220/230/240VAC (L-N)						
Rate frequency	50Hz / 60Hz						
Output power factor	1						
Voltage accuracy	± 1.0%						
Load response	< 5% (20% - 80% -20% step load)						
Recovery time	< 20ms (0% - 100% -0% step load)						
Output THDv	< 1% (linear load), < 5% (non-linear load according to IEC 62040-3)						
Overload	110%, 1 hour; 125%, 10 mins; 150%, 1 min; >150%, 200ms						
Frequency accuracy	0.1%						
Synchronize window	Settable, ± 0.5Hz ~ ± 5%Hz, default ± 3Hz						
Slew rate	Settable, ± 0.5Hz/S ~ ± 3%Hz/S, default ± 0.5Hz/S						
Crest factor	3:1						
Phase accuracy	120° ± 0.5°						
SYSTEM							
Efficiency - Normal mode	up to 96.5%						
Efficiency - Battery mode	up to 96.5%						
Display	LED + 7 inch touch LCD						
Certification - Safety	IEC62040-1, IEC60950-1						
Certification - EMS	IEC62040-2, IEC60950-4-2 (ESD); IEC61000-4-3 (RS); IEC61000-4-4 (EFT); IEC61000-4-5 (Surge)						
IP degree	IP20						
Noise (dB) (1 meter)	62dB @ 100% load, 58dB @ 45% load						
Operation temperature	0-40°C						
Humidity	0-95% (non condensing)						
Altitude	<1000m, 1000~2000m, power derates 1% every 100m						
Configuration	USB, RS232, RS485, Dry contact, Cold start						
Option	SNMP card, AS400 card, Parallel kit, LBS, Air filter						
Dimension (HxWxD) mm	Cabinet	307x442x711	797x442x660	976x442x660	307x442x711	797x442x660	976x442x660
	Cabinet (Wheels not included)		705x442x660	883x442x660		705x442x660	883x442x660
	Module		86x400x495 (2U)				
Weight (kg)	Cabinet	39	64	88	39	64	88
	Module	12	14	16	12	14	16