

ONLINE UPS 160KVA-600KVA(3:3)



AVO HIGH POWER TTIE SERIES

APPLICATION

Computer/critical servers/data center/hub & other network device/LAN/WAN.
Industrial/ Medical

FEATURES

- Online double-conversion with DSP control
- Capability of supplying distorted loads,
- IGBT rectifier and high input power factor (>0.99) containing output voltage distortion with
- High efficiency 93% crest factors
- Output power factor 0.9
- Front access makes maintenance and
- Low input distortion: THD $<5\%$ replacement easy, save space
- Generator compatible
- Intelligent self-diagnosing function, all
- Output Isolation transformer kinds of failure protection, large capability
- Inverter IGBT technology with high frequency of history records storage communication
- Low MTTR ($<0.5h$)
- High immunity to external disturbances
- Standard emergency power off (EPO)
- Independent control on the three Inverter
- Standard RS232 / RS485 / dry contacts phases communication port
- High instantaneous overload capacity
- Optional SNMP communication port
- High MTBF ($>200,000h$)
- Optional N+X redundancy parallel up to 6 units

TECHNICAL SPECIFICATIONS

MODEL	TTIE60160	TTIE60200	TTIE60250	TTIE60300	TTIE60400	TTIE60500	TTIE60600
Capacity	160 KVA 144 KW	200 KVA 180 KW	250 KVA 225 KW	300 KVA 270 KW	400 KVA 360 KW	500 KVA 450 KW	600 KVA 540 KW
INPUT							
Rated voltage	380V/400V/415Vac						
Voltage range	346 V ~ 456 V (full load) 304 V ~ 346 V (power derating 10%)						
Rated frequency	50/60 Hz						
Frequency range	50/60 Hz \pm 5 Hz						
Power factor	\geq 0.99						
Total harmonic distortion (THDI)	$>$ 3%						
Bypass voltage range	\pm 20%						
ECO voltage range	\pm 10%						
OUTPUT							
Rated voltage	380V/400V/415Vac						
Voltage regulation	\pm 1%						
Frequency	Synchronized with utility in mains mode; 50/60 Hz \pm 0.1% in battery mode						
Waveform	Sinusoidal						
Crest factor	3:01						
Total harmonic distortion (THDV)	$>$ 1 % (linear load); $>$ 5% (non-linear load)						
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 0 ms Inverter mode to ECO						
Inverter overload capability	102% -110%: transfer to bypass in 5 mins; 110% ~ 125%: transfer to bypass in 1 min; 125% ~ 150%: transfer to bypass in 30 s; 150% ~ 200%: transfer to bypass in 200 ms; $>$ 200%: shutdown in 100ms						
Bypass overload capability	\Rightarrow 150%: long time running 150% $<$ load $<$ 200%: shut down in 1 min $>$ 200%: shutdown in 100 ms						
BATTERIES							
DC voltage	600 V (12 V x 50 pes)						
Charging current	16A	20A	25A	30A	40A	50A	60A
SYSTEM							
Efficiency	Working mode s 93%, ECO mode is 98%						
Alarm	Battery mode, low battery, fans fault etc.						
Surge protection	IEC60664-1						
Insulation resistance	$>$ 2MO (500Vdc)						
Dielectric strength	2820 Vdc, no arc in 1 min						
IP rating	IP 20						
EMI	EN62040-2						
EMS	IEC61000-4-2(ESD) IEC61000-4-3(RS) IEC61000-4-4(EFT) IEC61000-4-5 (surge)						
COMMUNICAITONS							
RS232 /RS485/dry contacts	Supports Windows [®] 98 / 2000 / 2003 / XP / Vista / 2008 / Windows' 7/8/10						
SNMP (optional)	Power management from SNMP manager and web browser						
OTHERS							
Humidity	0-95% RH @ 0~40°C (non-condensing)						
Noise level	60 dB	65 dB	70 dB	75 dB			
Dimensions (Wx Dx H) (mm)	800 x 860 x1700	1210 x 860 x 1950	2380 x 860 x 1950				
Packaged dimensions (W x D x H) (mm)	900 x 950 X1950	1300 x 950 x 2200	1300 x 950 x 2200 (x2)				
Net/Gross weight (kg)	790/820	1135/1260	1355/1480	2090/2200	2300/2500	2690/2800	

- All specifications are subject to change without prior notice.
- Custom-made specifications are acceptable.