

# TG Series 3/3, 3/1

## Low Frequency Online UPS

10kVA~100kVA

3 Phase input/ 1 Phase output

10kVA~800kVA

3 Phase input / 3 Phase output



## Product

The TG series are Low Frequency UPS, which is commonly used in Industrial Power Supply. This Industrial UPS series is a Transformer Based UPS, which adopts Online Double Conversion technology to provide more comprehensive and complete protection for the equipment. Remote monitoring and network management through human-machine dialogue. The system has high system efficiency and complete protection functions.

It adopts the world's most advanced DSP digital control technology. It breaks through the technical bottleneck of the UPS industry, replaces the traditional analog circuit with an advanced digital circuit system, and realizes the parallel redundancy function of multiple UPS. It is an extraordinary innovation of EPI. In the digital circuit mode, the high-speed microcontroller and programmable logic device have more perfect circuit control, parameter setting and operation management, and the self-test and self-detection functions are more powerful.

## Application

Data Center, the network computer room, intelligent precision equipment, the financial, telecommunications, insurance, transport, taxation, military, security, energy, education, government, manufacturing and other industries etc.

## Features

- High reliable static switch
- Self diagnose and self protection
- Rechargeable battery intelligent management
- Strong English display interface
- Double transformation is on-line design
- Flexible weaver technology
- System with high efficiency

- Output transformer
- With optional 12 pulse rectifier
- Human-machine dialogue with the remote monitoring and network management
- Allowing 100% to balance working
- Intelligent battery management function to
- Protect the function is all ready
- Sound and light alarm
- A variety of voltage output
- Color optional
- Load protection ability
- Strong adaptability to the environment
- High battery optimize performance
- Network Management
- Energy saving and environmental protection design



160-250kVA

Model	TG3110	TG3115	TG3120	TG3130	TG3140	TG3150	TG3160	TG3180	TG31100
Capacity	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA	50 kVA	60 kVA	80 kVA	100 kVA
<b>Input</b>									
Phase	3 Phase+Neutral+Ground, 380V/400V/415V(L-L voltage)								
Input voltage range	304-456 VAC								
Input frequency range	50/60 Hz ± 5%								
Input PF	> 0.97								
<b>Output</b>									
Rated voltage	220/230 VAC								
Voltage regulation	± 1%								
Rated frequency	50/60 Hz								
Frequency precision	± 5%								
Output PF	0.9								
Output THDu	≤ 2% (linear load); ≤ 3% (non-linear load)								
Crest factor	3 : 1								
Inverter overload	5 min @ 110 - 150% load; 300 ms @ > 150% load								
<b>Battery</b>									
Voltage	360V/372V/384V/396Vdc								
Battery type	Sealed maintenance-free lead- acid batteries, VRLA-AGM / GEL / NiCd / Li-ion								
Charging time	8 - 10 hours recharged to 90%								
Backup time	Depending on the external batteries								
<b>System</b>									
Efficiency	92 %				93%				
Protection function	Output short-circuit protection; current-limiting protection								
Transfer time	Normal mode to battery mode, 0 ms								
Display	LCD+LED+Keyboard								
IP Class	IP 20								
Communication interface	RS232, SNMP card (optional)								
Temperature	Operation; 0 - 40 °C, Storage ; -25 - 55 °C								
Relative humidity	0 - 95%, no-condensing								
Altitude	<1500, Within 1500 to 4000m, pwer capacity decreases by 1% per 100m increasing in altitude								
Noise (1 m away)	<55 dB					<68 dB			
<b>Physical</b>									
Weight (kg)	80	100	108	150	172	220	230	290	430
	300x600x810			400x750x1010		450x830x1060		700x800x1500	

Model	TG33010	TG33015	TG33020	TG33030	TG33040	TG33060	TG33080	TG33100	TG33120
Capacity	10kVA	15kVA	20kVA	30kVA	40kVA	60kVA	80kVA	100kVA	120kVA
<b>Input</b>									
Phase	3-phase+N+G								
Rated Voltage	380/400/415Vac								
Input Voltage Range	285-475Vac								
Rated Frequency	50/60Hz								
Input Frequency Range	50H±10%, 60Hz±10%								
THDi	<10%								
Soft Start	1-100%, 5 seconds								
<b>Bypass</b>									
Phase	3-phase+N+G								
Voltage Range	380/400/415Vac ±15%								
Frequency Range	50/60Hz±10%								
<b>Output</b>									
Rated Voltage	380/400/415Vac								
Voltage Regulation	±1% for balance load; ±3% for unbalance load								
Rated Frequency	50/60Hz								
Frequency Precision	50/60Hz±0.05% (Battery mode)								
Outout PF	0.9								
THDu	<2% (linear load); <4% (non-linear load)								
Crest Factor	03:01								
Dynamic Voltage Transient	<5% (from 0 to 100% load)								
Transient Recovery Time	<10ms (±5%)								
Inverter Overload	125% load for 10 mins; 150% load for 1min								
<b>Battery</b>									
Voltage	360Vdc								
Battery Type	Sealed maintenance-free lead-Acid Battery, VRLA-AGM / GEL / NiCd / Li-ion								
Charging Voltage	Float charging: 405Vdc; boost charging: 435Vdc								
Charging Current	1-50A, settable according the battery capacity								
<b>System</b>									
Efficiency	91%								
Protection Function	Output short circuit protection; current-limiting protection								
Transfer Time	Normal mode to battery mode, 0ms								
Display	LCD+LED+Keyboard								
IP Class	IP20								
Communication Interface	RS232, RS485(optional), SNMP Card (optional)								
Temperature	Operation: 0-40 °C; storage: -25-55 °C								
Relative Humidity	0-95%, no-condensing								
Altitude	<1500. Within 1500 to 4000m, power capacity decreases by 1% per 100m increasing in altitude								
Noise (1-meter away)	<65dB								
<b>Physical</b>									
Weight (kg)	84	106	113	177	195	270	344	520	605
	300*610*810			400*750*1010		450*830*1500		700*800*1500	

Model	TG33160	TG33200	TG33250	TG33300	TG33400	TG33500	TG33600	TG33800
Capacity	160 kVA	200 kVA	250 kVA	300 kVA	400 kVA	500 kVA	600 kVA	800 kVA
<b>Input</b>								
Phase	3-phase+N+G					3-phase+G		
Rated voltage	380Vac							
Input voltage range	285 - 475 Vac							
Rated frequency	50/60 Hz							
Input frequency range	50/60 Hz ± 10%							
THDi	< 10%							
Soft start	1 - 100%, 5 seconds					5-600 seconds, settable		
<b>Bypass</b>								
Phase	3-phase+N+G							
Voltage range	380/400/415 Vac ± 15%							
Frequency range	50/60 Hz ± 10%							
<b>Output</b>								
Rated voltage	380/400/415 Vac							
Voltage regulation	± 1% for balance load; ± 3% for unbalance load							
Rated frequency	50/60 Hz							
Frequency precision	50/60Hz±0.05% (battery mode)							
Output PF	0.9							
Output THDu	≤ 2% (linear load); ≤ 4% (non-linear load)					≤ 1% (linear load); ≤ 3% (non-linear load)		
Crest factor	3 : 1							
Dynamic voltage transient	< 5% (from 0 to 100% load)							
Transient recovery time	< 10 ms (± 5%)							
Inverter overload	125% load for 10 mins; 150% load for 1 min							
<b>Battery</b>								
Voltage	360V/372V/384V/396Vdc						480Vdc	
Battery type	Sealed maintenance-free lead- acid batteries, VRLA-AGM / GEL / NiCd / Li-ion							
Charging voltage	Float charging: 13.5V/block; Boost charging: 14.5V/block							
Charging current	1- 50A, settable according the battery capacity							
<b>System</b>								
Efficiency	91%					94%		
Protection function	Output short-circuit protection; current-limiting protection							
Transfer time	Normal mode to battery mode, 0 ms							
Display	LCD+LED+Keyboard							
IP Class	IP20							
Communication interface	RS232, RS485(optional), SNMP card (optional)							
Temperature	Operation; 0 - 40 °C; Storage ; -25 - 55 °C							
Relative humidity	0 - 95%, no-condensing							
Altitude	<1500, Within 1500 to 4000m, power capacity decreases by 1% per 100m increasing in altitude							
Noise (1 m away)	<65 dB					71 dB	72 dB	74 dB
<b>Physical</b>								
Weight (kg)	710	800	850	1350	1550	1900	2500	3200
Dimension (W*D*H)mm	700*800*1700			1035*840*1800	1200*1000*1800	1400*1000*1900	2400*1200*1950	