

Alphapower

The TP600 stand-alone inverter utilises modern semiconductor technology alongside a specific control algorithm to deliver maximum power in a small and compact unit. The TP600 is designed with integrated utility bypass and the built-in dip switch allows user selectable priority working mode i.e. AC priority or DC priority mode – with a transfer time of less than 8ms.

Model	Capacity
TP605	500VA 24V _{DC} / 48V _{DC} / 110V _{DC} / 220V _{DC}
TP610	1kVA 24V _{DC} / 48V _{DC} / 110V _{DC} / 220V _{DC}
TP620	2kVA 24V _{DC} / 48V _{DC} / 110V _{DC} / 220V _{DC}
TP630	3kVA 24V _{DC} / 48V _{DC} / 110V _{DC} / 220V _{DC}
TP640	4kVA 24V _{DC} / 48V _{DC} / 110V _{DC} / 220V _{DC}
TP650	5kVA 24V _{DC} / 48V _{DC} / 110V _{DC} / 220V _{DC}

Some key features include:

- High frequency standby design
- Transfer time 5 – 8ms
- Pure sine wave with < 3% THD
- Working mode selectable (AC or DC priority)
- DC/AC isolation improving system security
- System parameters programmable
- Soft start
- Maximum efficiency 92%
- Offers complete protection
- Input reverse polarity protection
- RS232 or RS485 communication port and dry contacts
- LCD version available with history record and user settable parameters



Product Specifications – 24V_{DC}

Model No.	TP605-M	TP610-M	TP620-M	TP630-M	TP640-M	TP650-M		
Input	DC Voltage	24V _{DC}						
	DC Range	-18 – 25%						
	AC Voltage Range	-25 – 20%						
	AC Freq. Range	± 10%						
AC Output	Output Power	500VA	1kVA	2kVA	3kVA	4kVA	5kVA	
	Waveform	Pure Sine Wave						
	Power Factor	0.8						
	Nominal Output Voltage	110/120/220/230/240V _{AC} ± 2%						
	Frequency	50/60Hz ± 0.1%						
	Total Harmonic Distortion	< 3% linear load < 5% non-linear load						
	Crest Factor	3:1						
	Efficiency	≤ 92%						
	Overload Capacity	150% for 1 minute 125% for 10 minutes						
	Transfer Time	4ms						
	Response Time	< 30ms						
	Display & Communications	LED Indicator	Working mode					
			Fault					
Battery capacity indicator								
Load indicator								
LCD & LED (optional)		Working mode						
		Fault						
		All parameters						
Interface		RS485 OR RS232						
Physical	Dimensions mm W x D x H	436x255x44 17"x10"x1.7"	436x255x88 17"x10"x3.4"	436x330x88 17"x13"x3.4"				
	Weight Kg (lb.)	5 (11)	6 (13)	9 (19.8)	10 (22)	12.5 (27.5)	13.5 (29.7)	
	Cooling	Forced fan						
	Enclosure	IP20						

Physical	Mounting	19" Rack
	Operating Temperature	-10 – 50°C (14 – 122°F)
	Storage Temperature	-40 – 85°C (-40 – 185°F)
	Isolation	AC – DC: 2000V _{rms} DC – ground: 2000V _{rms} AC – ground: 2000V _{rms}
Standards	Safety	EN60950-1
	Emission	EN55022
	Immunity	EN55022

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Product Specifications – 48V_{DC}

Model No.	TP605-S	TP610-S	TP620-S	TP630-S	TP640-S	TP650-S		
Input	DC Voltage	48V _{DC}						
	DC Range	-18 – 25%						
	AC Voltage Range	-25 – 20%						
	AC Freq. Range	± 10%						
AC Output	Output Power	500VA	1kVA	2kVA	3kVA	4kVA	5kVA	
	Waveform	Pure Sine Wave						
	Power Factor	0.8						
	Nominal Output Voltage	110/120/220/230/240V _{AC} ± 2%						
	Frequency	50/60Hz ± 0.1%						
	Total Harmonic Distortion	< 3% linear load < 5% non-linear load						
	Crest Factor	3:1						
	Efficiency	≤ 92%						
	Overload Capacity	150% for 1 minute 125% for 10 minutes						
	Transfer Time	4ms						
	Response Time	< 30ms						
	Display & Communications	LED Indicator	Working mode					
			Fault					
Battery capacity indicator								
Load indicator								
LCD & LED (optional)		Working mode						
		Fault						
		All parameters						
Interface	RS485 OR RS232							
	3 x Dry contacts							
Physical	Dimensions mm W x D x H	436x255x44 17"x10"x1.7"	436x255x88 17"x10"x3.4"	436x330x88 17"x13"x3.4"				
	Weight Kg (lb.)	5 (11)	6 (13)	9 (19.8)	10 (22)	12.5 (27.5)	13.5 (29.7)	
	Cooling	Forced fan						
	Enclosure	IP20						

Physical	Mounting	19" Rack
	Operating Temperature	-10 – 50°C (14 – 122°F)
	Storage Temperature	-40 – 85°C (-40 – 185°F)
	Isolation	AC – DC: 2000V _{rms} DC – ground: 2000V _{rms} AC – ground: 2000V _{rms}
Standards	Safety	EN60950-1
	Emission	EN55022
	Immunity	EN55022

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Product Specifications – 110V_{DC}

Model No.	TP605-D	TP610-D	TP620-D	TP630-D	TP640-D	TP650-D	
Input	DC Voltage	110V _{DC}					
	DC Range	-18 – 25%					
	AC Voltage Range	-25 – 20%					
	AC Freq. Range	± 10%					
AC Output	Output Power	500VA	1kVA	2kVA	3kVA	4kVA	5kVA
	Waveform	Pure Sine Wave					
	Power Factor	0.8					
	Nominal Output Voltage	110/120/220/230/240V _{AC} ± 2%					
	Frequency	50/60Hz ± 0.1%					
	Total Harmonic Distortion	< 3% linear load < 5% non-linear load					
	Crest Factor	3:1					
	Efficiency	≤ 92%					
	Overload Capacity	150% for 1 minute 125% for 10 minutes					
	Transfer Time	4ms					
	Response Time	< 30ms					
	Display & Communications	LED Indicator	Working mode				
Fault							
Battery capacity indicator							
Load indicator							
LCD & LED (optional)		Working mode					
		Fault					
		All parameters					
Interface		RS485 OR RS232					
	3 x Dry contacts						
Physical	Dimensions mm W x D x H	436x255x44 17"x10"x1.7"	436x255x88 17"x10"x3.4"	436x330x88 17"x13"x3.4"			
	Weight Kg (lb.)	5 (11)	6 (13)	9 (19.8)	10 (22)	12.5 (27.5)	13.5 (29.7)
	Cooling	Forced fan					
	Enclosure	IP20					

Physical	Mounting	19" Rack
	Operating Temperature	-10 – 50°C (14 – 122°F)
	Storage Temperature	-40 – 85°C (-40 – 185°F)
	Isolation	AC – DC: 2000V _{rms} DC – ground: 2000V _{rms} AC – ground: 2000V _{rms}
Standard	Safety	EN60950-1
	Emission	EN55022
	Immunity	EN55022

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Product Specifications – 220V_{DC}

Model No.	TP605-E	TP610-E	TP620-E	TP630-E	TP640-E	TP650-E		
Input	DC Voltage	220V _{DC}						
	DC Range	-18 – 25%						
	AC Voltage Range	-25 – 20%						
	AC Freq. Range	± 10%						
AC Output	Output Power	500VA	1kVA	2kVA	3kVA	4kVA	5kVA	
	Waveform	Pure Sine Wave						
	Power Factor	0.8						
	Nominal Output Voltage	110/120/220/230/240V _{AC} ± 2%						
	Frequency	50/60Hz ± 0.1%						
	Total Harmonic Distortion	< 3% linear load < 5% non-linear load						
	Crest Factor	3:1						
	Efficiency	≤ 92%						
	Overload Capacity	150% for 1 minute 125% for 10 minutes						
	Transfer Time	4ms						
	Response Time	< 30ms						
	Display & Communications	LED Indicator	Working mode					
			Fault					
			Battery capacity indicator					
Load indicator								
LCD & LED (optional)		Working mode						
		Fault						
		All parameters						
Interface		RS485 OR RS232						
	3 x Dry contacts							
Physical	Dimensions mm W x D x H	436x255x44 17"x10"x1.7"	436x255x88 17"x10"x3.4"	436x330x88 17"x13"x3.4"				
	Weight Kg (lb.)	5 (11)	6 (13)	9 (19.8)	10 (22)	12.5 (27.5)	13.5 (29.7)	
	Cooling	Forced fan						
	Enclosure	IP20						

Physical	Mounting	19" Rack
	Operating Temperature	-10 – 50°C (14 – 122°F)
	Storage Temperature	-40 – 85°C (-40 – 185°F)
	Isolation	AC – DC: 2000V _{rms} DC – ground: 2000V _{rms} AC – ground: 2000V _{rms}
Standard	Safety	EN60950-1
	Emission	EN55022
	Immunity	EN55022

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