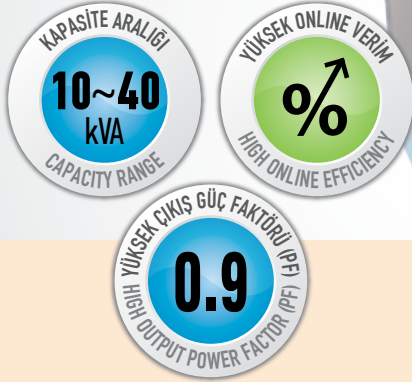


# TUNCMATİK

## HI-TECH ULTRA

### 10/15/20/30/40 kVA

#### ONLINE UPS



#### Real double conversion online technology

Online UPSs are an ideal choice especially for computers and other sensitive equipment. Online UPS completely isolates your equipment from the mains, charges its batteries from mains power and by using kinds of filters, supplies connected loads with power. As a result all unwanted conditions that may occur in mains are filtered by online UPS and your sensitive equipment is supplied with clean energy.

#### Real sine wave output

Fully compatible with all kinds of equipment. Ideal for medical and critical applications.

#### Wide input voltage range (120-276 VAC)

Online operation with very low and high voltages without using battery power.

#### Input power factor correction (PF=0.99)

Reduces consumed electrical energy and yields saving in electric bills.

#### High output power factor (PF=0.9)

15% more power at the output in comparison to standard 0.7 power factor UPS systems. Can support more equipment.

#### Smart charger technology for optimum battery performance

Provides longer battery life and lower operational costs due to special charging technique.

#### High performance microprocessor

Because of its CPU control, digital structure and high speed; UPS performs overload, short circuit, low-high voltage and overtemperature protections. By providing complete protection ensures a stable and reliable operation.

#### In slim structure, with a capacity reachable to 40KVA

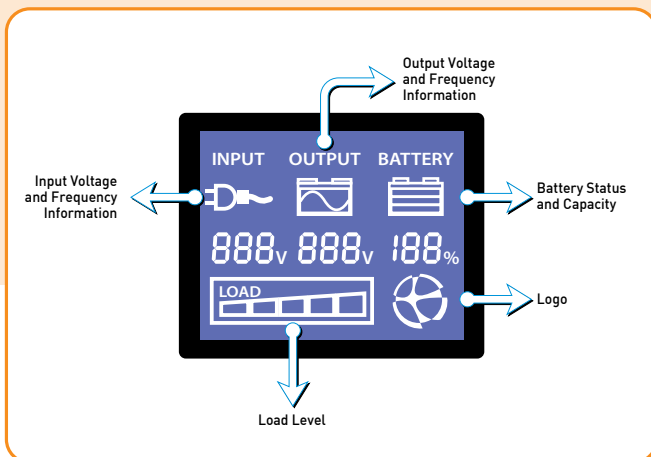
It gives possibility to put devices with high power, to narrow spaces such as server rooms.

#### High online efficiency

Hi-Tech Ultra pays off its investment costs in a short period of time by reaching 93% efficiency level in average, through its developed technology. Hi-Tech Ultra means an electric bill with lower amount.

#### Structure available for parallel operation

Hi-tech Ultra has the property to be used in parallel operation, with no need for additional investment cost. A communication cable is sufficient for this.



#### MULTI FUNCTION BUTTONS

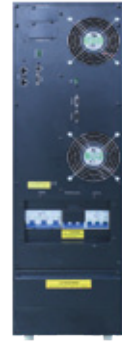
- 208/220/230/240 VAC Selectable Output Voltage
- 50/60 Hz Frequency Converter Mode
- ECO Mode High Energy Savings

Everything is under control with multi function, easy to read LCD panel. New advanced LCD panel shows functions, input and output readings, and alarms.

# TECHNICAL SPECIFICATIONS



## TUNCMATIK HI-TECH ULTRA 10/15/20/30/40 kVA ONLINE UPS



CAPACITY (kVA)	10 kVA 9 kW	15 kVA 13.5 kW	20 kVA 18 kW	30 kVA 27 kW	40 kVA 36 kW
<b>INPUT</b>					
Phase	3 phase 4 wire and ground				
Nominal voltage	380/400/415 VAC				
Voltaj range	208-478 VAC				
Frequency range	45-55Hz de 50Hz/54-66Hz at 60Hz (auto sensing)				
Current THDi	≤ 3% (100% nonlinear load)				
Bypass voltage range	Max. voltage: 220 VAC: +25% (optional +10%, +15%, +20%) 230 VAC: +20% (optional +1%, +15%) 240 VAC: +15% (optional +10%) Min voltage: -45% (optional -10%, -20%, -30%) Frequency protection range: ±10%				
Power factor	≥ 0.99				
<b>OUTPUT</b>					
Phase	3 phase 4 wire and ground				
Nominal voltage	380/400/415 VAC				
Power factor	0.9				
Voltage regulation	± 1%				
Frequency	Normal mode	± 1%, ± 2%, ± 4%, ± 5%, ± 10% of the rated frequency (optional)			
	Battery mode	[50/60±0.2%] Hz			
Crest factor	3:1				
THD	≤ 2% with linear load, ≤ 5% with non linear load				
Efficiency	93%	93%	93%	93,5%	94%
<b>BATTERY</b>					
Voltage	Standart unit: ±120Vdc (20pcs 12V7Ah) (2x20pcs 12V9Ah optional) Long run unit: ±96V/±108V/±120Vdc (16/18/20pcs optional)	Standart unit: ±120Vdc (2x20 ad. 12V7Ah) Long run unit optional voltage: ±96V/±108V/±120Vdc (16/18/20pcs optional)	Standart unit: ±120Vdc (3x20 ad. 12V7Ah) Long run unit optional voltage: ±96V/±108V/±120Vdc (16/18/20pcs optional)	Standart unit: ±240Vdc (4x20 ad. 12V7Ah) Long run unit optional voltage: ±192V/±204V/±216V/±240VDC (32/34/36/38/40pcs)	
Charge current [A] (charge current can be set according to battery capacity installed)	Standard unit: 1.35A (2.7A optional) Long run unit: Max. current 10A	Standard unit: 2.7A Long run unit: Max. current 10A	Standard unit: 4.5A Long run unit: Max. current 10A	Long run unit: Max. current 10A	
Transfer time	Utility to battery: 0ms; Utility to bypass: 0ms				
<b>PROTECTION</b>					
Overload	AC mode	Loads ≤ 110%: last 60min, ≤ 125%: last 10min, ≤ 150%: last 1min, > 150% change to bypass immediately			
	Battery mode	Loads ≤ 110%: last 10min, ≤ 125%: last 1min, ≤ 150%: > 150% shut down UPS immediately			
	Bypass mode	Breaker 20A	Breaker 32A	Breaker 40A	Breaker 63A
Short circuit	120 peak	140 peak		164 peak	
Over temperature	Line mode: Switch to bypass, Backup mode: Shut down				
Battery low	Alarm and switch off				
Self-diagnostic	Upon power on and software control				
EPO (optional)	Shut down UPS immediately				
Battery	Advanced battery management				
Noise suppression	Complies with EN62040-2[				
<b>DIMENSIONS &amp; WEIGHT</b>					
D x W x H (mm)	828 x 250 x 868				
Weight (kg)	115/57	170/63	171/64	223/71	73
<b>INDICATORS &amp; ALARM</b>					
Status LED & LCD	Line mode, Bypass mode, Battery low, Battery bad, Overload & UPS fault				
LCD panel	Input voltage, Input frequency, Output voltage, Output frequency, Load percentage, Battery voltage & Inner temperature				
Audible & Visual	Line failure, Battery low, Overload, System fault				
<b>ENVIRONMENTAL</b>					
Operating temperature	0-40°C				
Humidity	0-95% (non condensing)				
Noise level	≤ 60dB	≤ 63dB	≤ 65dB	≤ 73dB	≤ 73dB
<b>MANAGEMENT</b>					
Operating systems	Windows® 98/2000/2003/XP/Vista/2008, Windows® 7/8, Linux, MAC				
Interface	RS 485, USB, Paralel (Optional), Dry contact, Intelligent slot, SNMP adapter (Optional), Relay card (Optional)				