

HYBRID UPS

10-80KVA ONLINE

Tescom Hybrid ups sense the availability of solar power, grid power and the battery power for supping the connected loads using the most economical and ecological combination of these energy sources. A TGc series solar converter is connected to the DC bus of the Hybrid UPS and solar group is set as the primary energy source. It automatically starts a Diesel generator in case of solar energy, grid and battery group unavailability and an intelligent controller provides real time monitoring to your smartphone.

1 phase in / 1 phase out



GENERAL SPECIFICATIONS

- Simultaneous operation from solar energy, mains and battery
- Return on investment thanks to solar energy
- Maximum energy production with MPPT Algorithm
- Energy storage with battery bank
- Intelligent control system
- New intelligent hybrid technology
- Parallel operation up to 8 units
- Self diagnosis
- Advanced automatic battery testing every 72 hours
- Monitor via smartphone
- 4 line LCD panel
- Advanced short circuit and overload protection
- Internal battery cabinet

HYBRID UPS

ONLINE UPS *1 phase in / 1 phase out* 10-80 kVA



MODEL	DS310HYB	DS315HYB	DS320HYB	DS330HYB	DS340HYB	DS360HYB	DS380HYB
POWER (Input/output)	10KVA/9KW	15KVA/13.5KW	20KVA/18KW	30KVA/27KW	40KVA/36KW	60KVA/54KW	80KVA/72KW
INPUT							
Voltage	380/400 VAC 3 Phase + N + G \pm 20% (415 VAC (+15%, -25% optional))						
Frequency	50Hz / 60Hz selectable, \pm 5%						
Power factor (at 100% load)	\geq 0.99						
THDI	\leq 3% Depending on input line conditions and power						
By-pass voltage	380/400 VAC 3 Phase + N, 4 Wires \pm 10%						
Voltage distortion	$>$ 10%						
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator						
OUTPUT							
Power factor	0.9						
Voltage	380/400 VAC 3 Phase + N, \pm 1% (415 VAC optional)						
Frequency	50Hz / 60Hz selectable						
Frquency tolerance	Line synchronized: \pm 2% / Free running: \pm 0.1% (adjustable)						
Efficiency (at 100% load)	up to 94%						
Crest factor	3:1						
Overload protection	100% - 125% load: 10 min, 125% - 150% load: 1 min, - >150% load: by pass						
Other protections	Advanced short circuit, Voltage tolerance, DC balance, Regenerative load, Current limiting						
THD	$<$ 3% (at 100% linear load)						
BATTERIES							
Type	VRLA AGM / GEL / NiCd						
Nominal voltage	\pm 360 VDC						
Float/End of discharge voltage	\pm 405 VDC / \pm 300 VDC						
Battery ambient temp.	25°C						
Protections	3 level alarms, Battery fuses, Charging current limit, Temperature compensation (optional)						
GENERAL							
Standards	EN62040-1, EN62040-2, EN62040--3						
User interface	4 lines LCD panel, Mimic leds, 5 vector buttons, Buzzer, Optional TFT panel						
Indicators	P-N voltage, P-P voltage, Current, Power, Crest Factor, Frequency, PF, Service Time						
Advanced	Self diagnostics, 3 maintenance time indicators, Calibration over RS232,operating hour meter						
Communication	2xRS232 serial ports, 4 standard and 8 optional DRY contact alarm relays Optional: SNMP, RS485, Remote monitoring panel, MODBUS (RS485 or TCP/IP) USB Alarm Logger, TCP/IP ,GSM/GPRS Modem, Comport multiplexer						
Inputs	EPO input, Interactive battery panel input, Genset input						
Genset kit	Standard (programmable)						
Software	Standard T-Mon UPS Management Software (3 clients + 1 server management) Optional: T-Mon Admin Multi UPS monitoring 10-50-100-200 clients, T-Mon Server 50-100-200 clients						
Alarm logging	Standard: with time & date 512 event						
Protections	Power module over-temperature, Over current, Temperature high alarm						
Temparature range	0°C - 40°C						
Protection degree	IP20						
Relative humidity	90% max. (non-condensing)						
Altitude	$<$ 1000m above sea level						
Noise level	$<$ 57dBA		$<$ 62 dBA			$<$ 64 dBA	
Weight without batt. and converter (kg)	87		91	100	173	197	209
Dimensions converter (mm) HxWxD	1040x400x815				1440x515x855		
Transformer	Optional galvanic isolation transformer at the input & output						