

ON-LINE DOUBLE CONVERSION CONTINUITY GROUP IRIDIUM SERIES



The series IRIDIUM is a range of UPS, with on-line double conversion and VFI with digital control technology, available with powers from 10 KVA to 20 KVA for single-phase output and 10 KVA to 30 KVA for three-phase output. This Series for its versatility is suitable to feed any electrical and electronic system even in critical situations, in addition to the possibility of using it as a 50/60Hz frequency converter or using motor current generators.

FEATURES

- **DOUBLE CONVERSION UPS**

A true DOUBLE CONVERSION UPS which providing a perfect current, for a high quality complete protection of your sensitive devices, as PC networks (Network), Small computer centers, Servers, Telecommunications, Sanitary/hospital devices and, generally speaking, for all industrial applications.

- **φ 0.8 OUTPUT POWER FACTOR**

Comparing this ON-LINE UPS product class with the competition on the today market, this is the best output power factor. A high performance and efficiency for critical applications is thereby achieved.

- **INPUT WIDE RANGE (200 V -500 V)**

IRIDIUM is able to provide stable and precise currents to equipment to be connected even in very critical and unstable applications.

- **50/60 Hz FREQUENCY CONVERTER FUNCTION**

Lock output frequency to 50Hz or 60Hz regardless of input frequency and eliminates the By-Pass.

- **Emergency Power Off (EPO) FUNCTION**

This function is devoted to the UPS shutdown by the personnel in case of fire and other emergency events.

- **SNMP + USB + RS-232 PARALLEL OPERATION**

This feature allows you to have communication by all USB ports, RS-232 and SNMP simultaneously.

- **BATTERY CHARGER DESIGNED TO OPTIMIZE BATTERY PERFORMANCE**

The IRIDIUM UPS are equipped with a three extensible step battery charger in order to optimize battery performance. This feature prolongs the autonomy and optimizes battery recharge time; in addition, the extension of the battery charger is indispensable to recharge batteries with higher power used for longer capacity.

- **MANUAL BY-PASS FOR MAINTENANCE**

The manual By-Pass function ensures the lack of voltages inside the UPS for maintenance, leaving power to the other connected equipment.

- **Power Factor Correction ON ALL STAGES**

PFC improves the quality of the current consumption and increases the energy efficiency, with the consequent economic savings.

DATA SHEET

TYPE		IRIDIUM TM 10K/20K three phase / single phase ONLINE DOUBLE CONVERSION UPS	
MODEL		IR-TM-10K (S)	IR-TM 20K (S)
PHASES		Input three phase / output single phase	
POWER		10000 VA / 8000 W	20000 VA / 16000 W
INPUT	VOLT RANGE - Low line switch	176 VAC @ 100% load - 110 VAC @ 50% load	
	VOLT RANGE - Low line return	186 VAC @ 100% load - 120 VAC @ 50% load	
	VOLT RANGE - High line switch	300 VAC	
	VOLT RANGE - High line return	290 VAC	
	FREQUENCY RANGE	46~54 Hz □ 50Hz / 56~64 Hz □ 60Hz	
	PHASES	Three phase with neutral and ground	
	POWER FACTOR P.F.	□ 0.99 @ 100% load	
OUTPUT	Voltage tolerance (Battery mode)	± 1%	
	Frequency (synchronization range)	46~54 Hz □ 50 Hz / 56~64 Hz □ 60 Hz	
	Frequency (Battery mode range)	50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz	
	Peak current factor	3:1	
	Harmonyc distorsion	□ 2 % THD (linear load) □ 6 % THD (not linear load)	
	INTERVENTION TIME-From line to battery	Zero	
	INTERVENTION TIME-From bypass to battery	Zero	
EFFICIENCY	INTERVENTION TIME-Wave form (Battery Mode)	Pure sine wave	
	WITH NETWORK OPERATING	90%	
	WITH BATTERY OPERATING	88%	
BATTERY Standard Model	BATTERY TYPE	12 V / 9 AH	12 V / 9 AH
	BATTERY QUANTITY	20	40
	TYPICAL RECHARGE TIME	7 hours 90% capacity	9 hours 90% capacity
	CHARGING CURRENT (MAX.)	1.0 A	2.0 A
	CHARGING VOLTAGE	273.0 VDC	
BATTERY High capacity Model (S)	BATTERY TYPE	Depending on the capacity of external batteries according to the required capacity	
	BATTERY QUANTITY	Depending on the capacity of external batteries according to the required capacity	
	CHARGING CURRENT (MAX.)	4.0 A	8.0 A
	CHARGING VOLTAGE	273.0 VDC	
REPORTING	LCD PANEL	UPS status, load level, Battery level, Input/output voltage, battery discharge time, failure status	
ALARMS	BATTERY OPERATION	Sound every 4 seconds	
	LOW BATTERY	Sound every second	
	OVERLOAD	Double sound every second	
	FAULT	Continuous sound	
WEIGHT AND DIMENSIONS STANDARD MODEL	DIMENSION, W x L x H (mm)	592 X 250 X 576	862 X 250 X 826
	NET WEIGHT (kg)	83	139
WEIGHT AND DIMENSIONS MODELLO S	DIMENSION, W x L x H (mm)	592 X 250 X 576	
	NET WEIGHT (kg)	24	37
ENVIRONMENTAL DATA	OPERATING HUMIDITY	20-90 % RH @ 0- 40°C (without condensation)	
	NOISE LEVEL	< 45dBa @ 1 meter	< 60dB @ 1 meter
INTERFACES	SMART RS-232/USB	Windows family, Novell, Linux and FreeBSD	
	OPTIONAL SNMP	Power management for SNMP manager and web browser	

DATA SHEET

TYPE		IRIDIUM 10K/20K/30K three phase / three phase ONLINE DOUBLE CONVERSION		
MODEL		IR-TT 10K	IR-TT 20K	IR-TT 30K
PHASES		Input Three phase Input / Output Three phase		
POWER		10 KVA / 8 KW	20 KVA / 16 KW	30 KVA / 24 KW
INPUT	VOLT RANGE - Low line switch	3 x 400Vac (Three phase with neutral and ground)		
	VOLT RANGE - Low line return	305 - 478 VAC (F/F) @ 100% load - 190 - 520 VAC (F/F) @ 50% load		
	VOLT RANGE - High line switch	46~54 Hz □ 50Hz / 56~64 Hz □ 60Hz		
	VOLT RANGE - High line return	Three phase with neutral and ground		
	FREQUENCY RANGE	≥ 0.99 @ 100% load		
	PHASES	< 6% @ 100% load		
	POWER FACTOR P.F.	360 - 380 - 400 - 415V Three phase with neutral and ground		
OUTPUT	VOLTAGE TOLERANCE (Battery mode)	± 1%		
	FREQUENCY (synchronization range)	46~54 Hz □ 50 Hz / 56~64 Hz □ 60 Hz		
	FREQUENCY (Battery mode range)	50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz		
	PEAK CURRENT FACTOR	3:1		
	HARMONYC DISTORSION	≤ 2 % THD (linear load) ≤ 5 % THD (not linear load)		
	INTERVENTION TIME-From line to battery	Zero		
	INTERVENTION TIME-From bypass to battery	Zero		
	INTERVENTION TIME-Wave form (Battery Mode)	Pure sine wave		
EFFICIENCY	WITH NETWORK OPERATING	89 - 90%		
	WITH BATTERY OPERATING	86 ÷ 89%		
BATTERY Standard Model	BATTERY TYPE	12 V / 9 AH		
	BATTERY QUANTITY	20	2 x 20	3 x 20
	TYPICAL RECHARGE TIME	1.0 A	2.0 A	4.0 A
	CHARGING CURRENT (MAX.)	273.0 VDC		
	CHARGING VOLTAGE	41.0 VDC ± 1%	82.1 VDC ±1%	
BATTERY High capacity Model (S)	BATTERY TYPE	Depending on the capacity of external batteries according to the required capacity		
	BATTERY QUANTITY	Depending on the capacity of external batteries according to the required capacity		
	CHARGING CURRENT (MAX.)	4.0 A	8.0 A	12.0 A
	CHARGING VOLTAGE	273.0 VDC		
REPORTING	LCD PANEL	UPS status, load level, Battery level, Input/output voltage, battery discharge time, failure status		
ALARMS	BATTERY OPERATION	Sound every 4 seconds		
	LOW BATTERY	Sound every second		
	OVERLOAD	Double sound every second		
	FAULT	Continuous sound		
WEIGHT AND DIMENSIONS STANDARD MODEL	DIMENSION, W x L x H (mm)	815 X 250 X 826	815 X 250 X 826	815 X 300 X 1000
	NET WEIGHT (kg)	109	164	234
WEIGHT AND DIMENSIONS MODELLO S	DIMENSION, W x L x H (mm)	592 X 250 X 826		815 X 250 X 826
	NET WEIGHT (kg)	38	40	64
ENVIRONMENTAL DATA	OPERATING HUMIDITY	0-90 % RH @ 0- 40°C (without condensation)		
	NOISE LEVEL	< 60dBA @ 1 meter	< 65dB @ 1 meter	
INTERFACES	SMART RS-232/USB	Windows family, Linux, Unix and MAC		
	OPTIONAL SNMP	Power management for SNMP manager and web browser		



Via Gaetano Donizetti, 109/111 - 24030 Brembate Di Sopra (BG)
Geller Business Centre - D2 Building

Phone **+39 035 4379962** Fax **+39 035 592935**
sales@zutronic.it - **www.zutronic.it**

