

MEDIUM SIZE COMMERCIAL TYPE NO-BREAK UPS

GTM – GTT Series

Typology

No-Break type single output Uninterruptible Power Supply with Pulse Width Modulation technology and output isolation. Particularly developed to be used where good reliability, operation safety and capability to eliminate the effects of ac mains interruptions and instability are needed. Pulse width modulation technology permits to reduce costs, dimensions and acoustic noises without renounce to excellent electrical performances.

Electrical characteristics

Most important characteristics that distinguish this type of UPS are:

Input voltage	1F=230V - 3F=400V+N
Accepted tolerance	±15%
Input frequency	50 Hz
Accepted tolerance	±2%
Output voltage	1F=230V - 3F=400V+N
Guaranteed tolerances	±5%
Harmonic distortion	less than 5%
Input-Output isolation	with output transformer
Neutral I/O managing	TT – TN - IT
Available autonomies	10 – 20 minutes
Short circuit current	150% maximum load
Inrush current	<4 x maximum load
Input power factor	better than 0,7
AC/AC efficiency	better than 80%
Single unit MTBF	about 80.000 hours

Output power

Product range comprises the following models as a function of the output power and input / output phases.

Model	Input type	Output type	Real output power	Apparent output power
GTM-021	1F	1F	1400 W	2000 VA
GTM-022	1F	1F	1400 W	2000 VA
GTM-031	1F	1F	2400 W	3000 VA
GTM-032	1F	1F	2400 W	3000 VA
GTM-051	3F	1F	4000 W	5000 VA
GTM-052	3F	1F	4000 W	5000 VA
GTM-071	3F	1F	5600 W	7000 VA
GTM-072	3F	1F	5600 W	7000 VA
GTM-102	3F	1F	8000 W	10000 VA
GTM-152	3F	1F	12 kW	15 kVA
GTT-152	3F	3F	12 kW	15 kVA
GTT-202	3F	3F	16 kW	20 kVA
GTT-302	3F	3F	24 kW	30 kVA
GTT-402	3F	3F	32 kW	40 kVA
GTT-602	3F	3F	48 kW	60 kVA
GTT-802	3F	3F	64 kW	80 kVA

Accessories

An important range of accessories are available to permit the adaptation of the UPSs to more complex applications.

Factory installed types are the following.

- Input magnetothermic breaker**
 - Auxiliary ac mains magnetothermic breaker**
 - Static by-pass switch.**
 - Manual by-pass switch**
 - Auxiliary line synchronisation**
- On request available types are the following.
- Output magnetothermic breaker (opt. OB)**
 - Measure and control digital supervisor (opt. SM)**
 - Parallel and load sharing (opt. PS)**
 - Additional storage batteries (opt. ABTT)**
 - Double transformer (I/O) (opt. DT)**
 - Triple transformer (I/O/A) (opt. TT)**

Mechanical characteristics

Mechanical construction is in a metal board with forced ventilation and IP31 protection degree. Dimensions and modularity are a function of the output power and available reserve time.

Model	Storage minutes	Width mm	Dept h mm	Height mm	Weight Kg
GTM-021	10	158	485	340	70
GTM-022	20	316	485	340	110
GTM-031	10	158	590	480	120
GTM-032	20	316	590	480	180
GTM-051	10	230	650	528	280
GTM-052	20	460	650	528	360
GTM-071	10	230	650	860	550
GTM-072	20	460	650	860	620
GTM-102	20	460	650	860	700
GTM-152	20	790	825	1100	850
GTT-152	20	790	825	1100	850
GTT-202	20	790	825	1100	900
GTT-302	20	790	825	1100	1100
GTT-402	20	790	825	1400	1200
GTT-602	20	790	825	1800	1400
GTT-802	20	1580	825	1400	1600

Environment compatibility

UPSs are submitted to typical or production tests to warrant environment compatibility. Most important are the following. (*identifies type tests).

*Vibration	5 m.s ⁻² - 0,032 m
*Storage temperature	from -10 to 60 °C
*Working temperature	from 0 to 40 °C
*Line current distortion	< 40%
Pulse strenght 1,2/50 µs	2 kVp on input side
Dielectric strenght I / O / PE	1,5 kV RMS
Insulation resistance I / O / PE	100 MΩ a 500 Vcc
Reference standard for CE mark	EN50081-2 / 50082-2