

INV-TC

SINEWAVE INVERTER MODULES



POSITIVE PROBLEM SOLVING **+ =**

The INV-TC series are a highly reliable series of DC/AC Inverters. An integrated DC breaker is featured on most of the models.

Backed by a 2 year warranty these rugged modules have a wide operating temperature range down to -25°C. A variety of different inputs and output power levels are available. Each unit in the range has a supervisory circuit to ensure that batteries are not subjected to a damaging deep discharge. The input is automatically disconnected should the input voltage fall too low. Protection is also provided for output short circuit, overload and over temperature.

- + Adjustable Standby Function**
- + High Overload Capability**
- + True Sinewave Output**
- + High Efficiencies**
- + Compact Design**

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FURTHER DETAILS

Contacts are available that can be wired out to an external switch to enable a remote ON/OFF function. The INV-TC's are also built with an adjustable standby feature. This is useful to ensure that connected loads do not needlessly drain the batteries when in sleep mode. Adaptive cooling is provided by a temperature and load controlled fan. The high peak capability along with a wide output power factor range makes this family of inverters ideal for numerous applications including motor type devices.

SELECTION TABLE

Part Number	Max. Continuous Power	Input Voltage	Output Voltage	Output Current
INV-TC 13-12	1000VA	12VDC	230VAC	5.7A
INV-TC 20-12	1800VA	12VDC	230VAC	8.7A
INV-TC 15-24	1200VA	24VDC	230VAC	6.5A
INV-TC 22-24	2000VA	24VDC	230VAC	9.6A
INV-TC 30-24	2700VA	24VDC	230VAC	13A
INV-TC 13-48	1300VA	48VDC	230VAC	5.7A
INV-TC 22-48	2000VA	48VDC	230VAC	9.6A
INV-TC 35-48	3200VA	48VDC	230VAC	15.6A
INV-TC 25-110	2200VA	110VDC	230VAC	11A

Different output voltage and frequencies are possible. Please contact ETPS to discuss your requirements.

TECHNICAL DATA

	INV-TC 13-12	INV-TC 20-12	INV-TC 15-24	INV-TC 22-24	INV-TC 30-24	INV-TC 13-48	INV-TC 22-48	INV-TC 35-48	INV-TC 25-110
Rated Voltage UDC _{IN}	12VDC		24VDC			48VDC			110VDC
Input Voltage Range	10.5 - 16V		21 - 32V			42 - 64V			96 - 114V
Dynamic Low Voltage Cut Off	10.5 - 9V		21 - 18V			42 - 36V			96 - 84V
Rated Current IDC _{IN}	125A	195A	72A	110A	150A	32A	54A	80A	23A
Current IDC _{IN} Max.	340A	520A	140A	205A	340A	85A	96A	210A	70A
Rated Power P ₁₀ [10min at TA = 20°C]	1400VA	2300VA	1700VA	2900VA	3200VA	2700VA	2700VA	3900VA	2900VA
Rated Power P ₃₀ [30min at TA = 20°C]	1300VA	2000VA	1500VA	2200VA	3000VA	1300VA	2200VA	3500VA	2500VA
Continuous Power PD	1000VA	1800VA	1200VA	2000VA	2700VA	1000VA	2000VA	3200VA	2200VA
Rated Output Current IAC _{OUT}	5.7A	8.7A	6.5A	9.6A	13A	5.7A	9.6A	15.6A	11A
Short Circuit IAC _{IN} (max. 0.5s)	16A	24A	16A	24A	35A	16A	16A	24A	16A
Adjustable Standby Level (logarithmic)	5 - 60W	5 - 60W	5 - 60W	5 - 60W	5 - 60W	5 - 60W	5 - 60W	5 - 60W	4 - 40W
Consumption 230VAC OK	10W	16W	12W	12W	22W	10W	12W	12W	13W
DC- Breaker/Fuse	No	No	100A	125A	No	80A	80A	100A	63A
Alarm Contact (Insulated Relay)	No	Yes	No	No	Yes	No	No	Yes	Yes
Weight	15.5kg	20kg	16kg	20kg	27kg	15.5kg	20kg	30kg	25kg
Unit Length	385mm	456mm	385mm	456mm	456mm	385mm	456mm	456mm	456mm
Unit Width	260mm	320mm	260mm	320mm	320mm	260mm	320mm	320mm	320mm
Unit Height	182mm	211mm	182mm	211mm	211mm	182mm	211mm	211mm	211mm

GENERAL

Rated Output Voltage UAC _{OUT}	230VAC ± 2% (short circuit proof)
Output Frequency	50Hz ± 0.5% (true sinewave)
Allowable CosPhi	0.3 - 1.0
Max Efficiency	92 - 94% (depending on model)
Consumption Standby ON/OFF	va. 1.5W (test impulse every 800ms/10mA)
Ambient Temperature Range	-25°C to +50°C (max. 95% rH non condensing)
Remote Control ON/OFF	Yes (with external switch)
Status Indication	LED
Torodial Transformer	EN 61558 (IEC 61558)
Temperature & Load Controlled Fan	ON 55°C/OFF 45°C
Reset after Short Circuit	Every 60s
Reset after Overload	Every 60s
Reset after Overtemperature	Automatically after reaching semiconductor temperature +45°C
Reset after Battery Failure	Automatically after reaching UDC _{IN}
Included in Delivery	Connector for non-heating apparatus
IP Rating	IP 20
Warranty	2 years

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



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POSITIVE
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ETPS engineer electronic power supply and testing systems. Our problem solving skills provide the spark of innovation to some of the world's leading technology brands.



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