> Description

This DC/AC 230 V inverter is dedicated to supply AC equipments in mobile vehicles, such as trucks, buses or military vehicles.
Qualified for military applications, this inverter is waterproof and has a strong resistance to shocks and vibrations.

> Input Specifications

Product reference	ICD 500
Nominal input voltage	24 VDC
Input voltage range	18 to 32 VDC
Reverse input voltage protection	Yes, by reverse diode
Inrush current limitation	Yes, > 10 In

> Output Specifications

Product reference	ICD 500
Nominal output voltage	230 VAC
Nominal frequency	50 Hz
Wave shape	Sinus or quasi sinus
Nominal output current	2,17 A
Crossed regulation (load + line)	± 10%
Nominal output power	500 W
Cos φ	0,7
Efficiency	> 80%
Thermal protection	Yes
Output current limitation	> 2,9 A
Permanent short circuit protection	Yes

> Environmental details

Product reference	ICD 500
Operating temperature range	-20°C to +70°C
Derating	Without derating
Storage temperature range	-40°C to +85°C
Temperature coefficient	< 2.10^{-4} /°C
Relative humidity at 40°C	> 95%
Cooling	Natural convection
Insulation resistance	> 7 MΩ under 500 VDC between input + ground and output
Dielectric strength	2200 VAC between input and output
MTBF (MIL HDBK.217 F)	GF 25°C: > 50 000 h
Coating	PCB coated with varnish
Protection index	IP44

> Applicable Norms

Item	Reference	Level	Compliance
Broad band: radiation	GAM EG13	Test 62 R3 curve A1 board 14	X
Broad band: conduction	GAM EG13	Test 62 C2 curve A1 board 14	X
Narrow band: radiation	GAM T13	Parts 62 R1E and 62 R1L	X
Narrow band: conduction	GAM T13	Parts 62 C1E and 62 C1L	X

> Mechanical Characteristics

Product reference	ICD 500
Box material	Extruded aluminium
Potting	Yes
Dimension	280 x 220 x 85 mm
Fixing	4 screws Ø 4,2 mm
Input connector	Circular connector (3 male pins)
Output connector	CE waterproof socket (53900 or equivalent)

> Technical Drawing