

## Product Description:

### AC/DC Power Supply

#### Description:

The AC / DC power supply via a connector accepts a type of service line in input 60Hz, three phase, 115Vac line to line, three wires without neutral, star configured, "as for STANAG 1008 Edition 9" to transform into voltage DC output.



AC / DC is a converter with multiple outputs on different connectors, it is also equipped with two I / O interface connectors and guarantees the following features and functions:

- To execute commands
- Manage the sequence of switching on the output voltages.
- To monitor the output voltages
- To protect the loads from overvoltage or undervoltage events on the output voltages
- To protect the loads from overcurrent events on the output voltages
- To protect RESM\_PS from over temperature events
- Manage communication with the ETR function "Elapsed time recorder".

All connectors used are compliant to operate in the marine environment "Circular MIL Spec D38999 III Series", and are supplied with Safe-T cable according to NASM 33540.

The power supply designed to provide extremely high power conversion efficiency across the entire output power range is based on fixed frequency rectifier technology and uses no optocouplers for the voltage control loop. The components used follow the conservative guidelines of component downgrading, with the aim of increasing reliability.

The quality level of the selected components and electronic parts is adequate for the assignment of quality factors in accordance with Section 2 of ANSI / VITA 51.1-2008.

The AC / DC power supply is composed as follows:

- ✓ Anti-Surge Section
- ✓ EMI filter section
- ✓ AC / DC Conversion Section + Power Factor Correction
- ✓ DC / DC Converters Section
- ✓ Output filters section
- ✓ Control and Signal section
- ✓ Recorder of the elapsed time

The structure of the AC / DC as well as the internal parts are made of aluminum alloy of the 5000 and 6000 series equipped with Surtec 650 conductive anticorrosive treatment, according to MIL DTL 5541F Class III, the external surfaces can be painted on request.

Each power supply is 100% tested and with the ability to perform Environmental Stress Screening (ESS) based on specific program requirements.

MIL-STD-810G w/Change1 and MIL-STD-461F fully qualified.

REACH compliance with the regulation CE n° 1907/2006, CE marked.

### Key Specifications:

- Input Line type:  
60Hz, three phases, 115Vac line to line, without neutral, star configured as for STANAG 1008 Edition 9.
- Power Outputs:

▪ 28Vdc	$I_{OUT-MAX} = 39A$	$P_{OUT-MAX} = 1100W$
▪ 28Vdc	$I_{OUT-MAX} = 19A$	$P_{OUT-MAX} = 530W$
▪ 54Vdc	$I_{OUT-MAX} = 9A$	$P_{OUT-MAX} = 490W$
▪ 45,5Vdc	$I_{OUT-MAX} = 12,5A$	$P_{OUT-MAX} = 570W$
- Overvoltage; Undervoltage; Overcurrent protection on each single output
- Operating Temperature -5 to 55°C
- Storage Temperature -40 to 85°C
- Light Indicators Input AC Line; Output DC Line; Fail; H.T°;
- EMI/EMC Compliant with MIL-STD-461F
- Environmental conditions compliant with MIL-STD-810G with Change1.
- CE Marked
- REACH compliant with the regulation CE n° 1907/2006
- Dimensions (h x l x d): 265 x 356 x 395mm
- Weight: 25kg