IPS Intelligent Power Switch

IPS

Intelligent Power Switch
for gracefully turning on and off
PCs in R&D vehicles

The Nickl Intelligent Power Switch IPS was designed to start and to gracefully shut down a computer with one control signal.

For example, it allows to control up to two computers via the ignition key or the centralized door locking system. The computer can be powered-up if the engineer opens the centralized door locking and it can be shut-down and powered-down when the engineer leaves the car. Up to two computers can be controlled, such as a real-time and a visualizing computer.

The Nickl IPS is available either as complete control box with MIL-C-5015 connectors or Lemo connectors or as a single PCB which can be mounted in a existent computer-rack.

Due to its capability to switch up to 30 A and its wide operating voltage range, it is able to switch almost all DC power supplies of computers in a R&D vehicle.

- **Controls up to two Computers**
- **Switch Capability of up to 30 A**
- **Powering, Booting, Shut-Down and Power-Cutting with one Control Line or a Switch Button**
- **Acoustic signal before Power-Cutting**
- **MOSFET-Switch, no loose Parts**
- **Supply voltage monitoring prevents complete Battery Discharge**

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Nickl
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IPS Intelligent Power Switch

Technical Data

Power-On	Power-up via a) rising edge on control input, qualification time 1 s b) pressing Button for at least 1 s
Shut-Down	Operating system shut-down via a) falling edge on control input, qualification time 10 s b) pressing button for at least 1 s Power-off after 2 min.
Protocol	UPS simple protocol via RS-232
Connectors	1EMIPS: Input=header, output=receptacle, MIL-C-5015, style 3012, size 14S 1EMIPS-L: Input: Lemo EBC1S302CLL, output: Lemo EBC1S303CLL 1EMIPS-MF: Flat connectors according to DIN 46244
Controls	1 x Button for manually controlling 1 x LED as status indicator 1 x Buzzer for acoustic warnings signals
Power Supply	7 .. 36 V
Current Rating	max. 30A @ Ta=25°C, with Lemo connectors max. 10A
Leakage Current	typ 0,05 µA @ Vin = 12 V, Ta = 25 °C
Quiescent Current	typ 80 mA @ Vin = 12 V, Ta = 25 °C
ENABLE Input	0V < Low < 2V < High < 36V
Dimensions	(110 x 117 x 39) mm
Case	Polystyrol, anthracite
Operating Temperature	0 .. 70 °C
Storage Temperature	-40 .. 85 °C
Mass	With case: 263 g, PCB module: 72 g

Accessories

1EZKA-DB9DS9-2
Cable, RS-232, 1:1, D-Sub9 Receptacle/D-Sub9 Header, L=2m

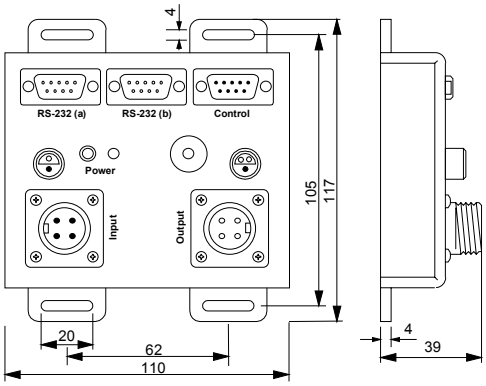
Order Codes

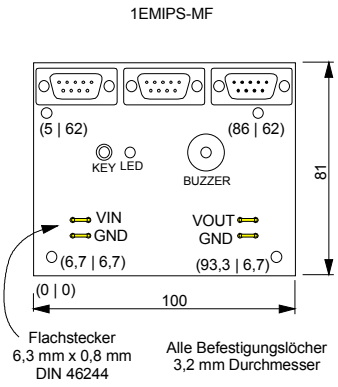
1EMIPS-MF
Intelligent Power Switch with shut-down output for 2 PCs, w/o case, connectors DIN46244

1EMIPS
Intelligent Power Switch with shut-down output for 2 PCs, power connector 2x 4 pole MIL-C-5015 circular connector (d=22mm)

1EMIPS-L
Intelligent Power Switch with shut-down output for 2 PCs, with additional Lemo receptacles

- Further variants on request -





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