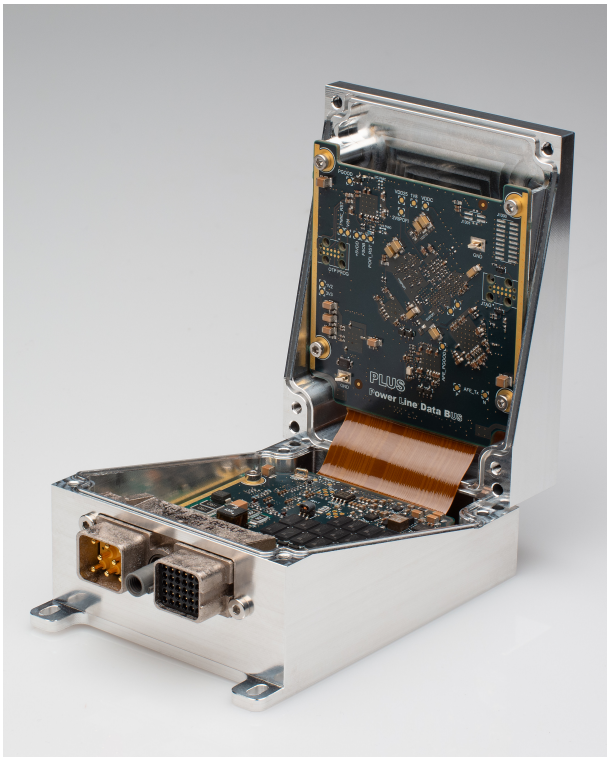
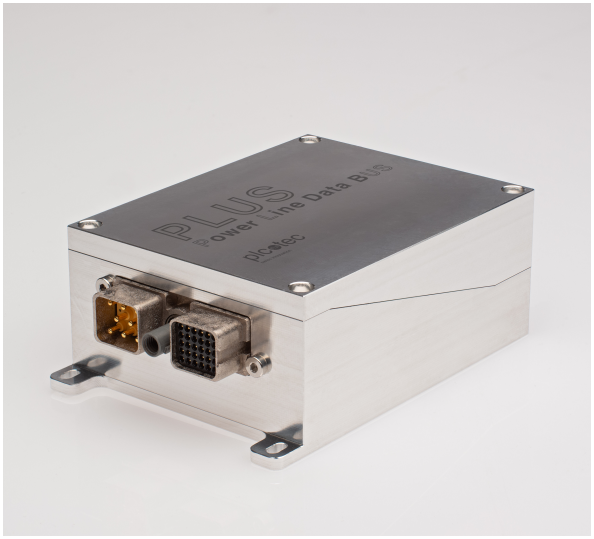
plc-tec
swiss innovation





PLUS-V2 Modem Product Platform

For user field trials and product reference design

PLUS-V2 Modem Product Platform

The PLUS-V2 modem product platform provides a hardware platform to be integrated into users' product development environment and to test the PLUS protocol in industrial field trials. An innovative design with a single rigid-flex PCB significantly reduces the overall volume. At the core of the platform is the Microsemi PolarFire flash-based FPGA upon which the PLUS protocol is realized. The PolarFire FPGA provides a low-power, secure and reliable hardware solution which serves as reference platform upon which PLUS-based products can be developed. A capacitive coupler is integrated to interface to the power line. A ruggedized housing and avionics standardized connectors allow PLUS-V2 to be used in harsh industrial environments.

PLUS-V2 Modem Data Interfaces

The PLUS-V2 prototype can interface to application equipment through an available Ethernet interface, CAN interface or GPIOs.

PLUS-V2 Modem Management

Configuration updates, status information reading, and firmware updates can be formed remotely using the PLUS Management Data Service (MDS) over the attached Ethernet network. MDS allows all the PLUS modems in the network to be configured from any one single modem.

PLUS-V2 Prototype Specification

PLUS-V2 Housing	Aluminum housing Screw mount with mounting feet Dimensions (incl. mounting feet): 109 mm (L) x 78 mm (W) x 43.2 mm (H)
PLUS-V2 Power Supply	Input voltage: 9-36VDC Power consumption: 7W nominal Power supply input available on connector X1 Protection: 1.5kV isolated supply
Data Connectors	Data Connector (X1) 30-pin Deutsch DMC-M DMC-LPR 30-23 P
Ethernet	ETH 100BASE-TX
CAN	CAN Up to 1Mbps
Other Interfaces	One (1) 5V GPIO Six (6) Digital Signal Input (DSI) Eleven (11) Pin Programming GPIO UART
Power/PLC Interface	Power Connector (X2) 8-pin Deutsch DMC-M DMC-LP 08-16P
Supported Voltage Ranges	DC Voltage Range: 0-540VDC AC Voltage Range: 0-230VAC
Surge Voltage	Differential (1.2/50us): 2 kV, Z_src = 2 Ohm Common Mode (1.2/50us): 4kV, Z_src = 12 Ohm
Supported Current Range	N/A – current on the power line is not relevant due to the use of a capacitive coupler

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