



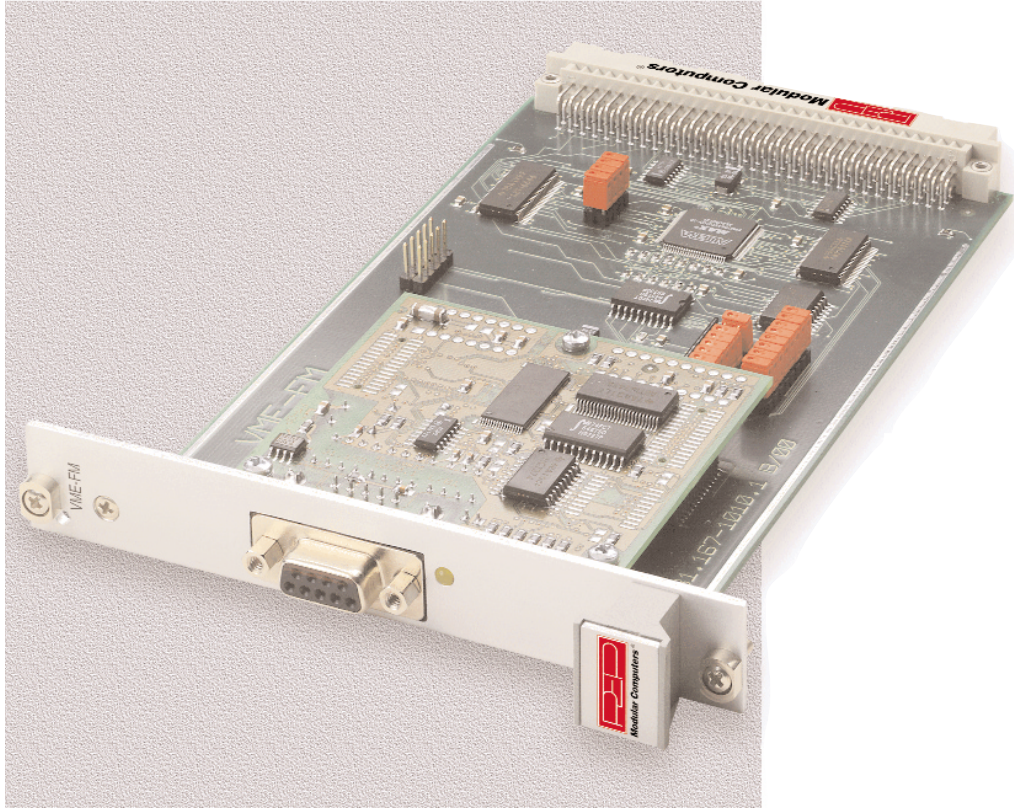
NETWORKS  
FIELDBUS

# VME-FM

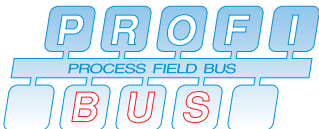
## Flexible Fieldbus Interface for VMEbus-Based Applications

### Flexible Fieldbus Solutions

- ▶ Fieldbus interface with FM-DP or FM-CAN modules
- ▶ PROFIBUS DP or
- ▶ CAN/CANopen
- ▶ Protocol stack in firmware
- ▶ Extended operating temperature range (optional)
- ▶ CE conformance



# CAN



An industrial I/O module for VMEbus based systems utilizing plug-in fieldbus modules for CAN or PROFIBUS operation.





# Product Overview

## VME-FM

**PEP's VME-FM fieldbus interface module allows connection of sensors and actuators on different bus architectures while at the same time allowing computer communication.**

Utilizing readily available PEP fieldbus modules (FMs), the VME-FM was developed to allow flexibility when defining a field system. The fieldbus modules possess a dual-ported memory area for easy interfacing to a host CPU microcontroller which performs most of the protocol stack handling. As a single-height VMEbus slave board the VME-FM provides the customer with ample flexibility potential.

The VME-FM used together with the FM-DP fieldbus module allows a PROFIBUS DP slave interface to be realised that is based on the SPC3 controller from Siemens and conforms to the European EN 50170 standard.

When used with the FM-CAN module the VME-FM becomes a CAN controller based on the SJA 1000 chip from Philips. Providing CANopen master and slave capabilities as defined by the CiA (CAN in Automation) the FM-CAN communicates via an opto-coupled high-speed ISO11898 interface that supports data rates up to 1 MBaud.

### CAN Interface

Controller: SJA1000, CAN 2.0B  
Protocol: CANopen master/slave  
Physical Interf.: High-speed ISO11898 CAN; (9-pin D-Sub)  
Transfer Rate: Up to 1 MBaud  
Isolation: 1000V DC optoisolation

### DP Interface

Controller: SPC3  
Protocol: DP-slave; DIN 19245 Part 3/EN 50170 vol.2  
Physical Interf.: Optoisolated RS485; (9-pin D-Sub)  
Transfer Rate: 9.6 kBaud .. 12 MBaud (auto. detect)  
Isolation: 1000V DC optoisolation

### Common

LEDs: Show fieldbus communication  
VME Interface: A23/A19:D16/D8 slave  
Board Size: 100mm x 160mm  
Front-Panel: 1 slot, 20.4mm (4HP)  
Weight: 130g  
Power Req.: +5V DC @ 340mA (typ.)  
Temp. Ranges: 0°C to +70°C (standard)  
-40°C to +85°C (opt. E2)  
-55°C to +85°C (storage)  
Oper. Humidity: 0% to 95% non-condensing

all PEP hardware carries a full 2 year warranty

© PEP 1998. All trademarks are recognised. Subject to change without notice.  
Publication Number AB 15/91 DS-0/098

Product	Description	Order No.
VME-FM	VME carrier board for FM-modules	17725
FM-CAN	Intelligent CAN high-speed ISO 11898 interface module with CANopen support for the VME-FM	18551
FM-DP	Intelligent PROFIBUS-DP slave interface module for the VME-FM	18553

▶ USA ▶ GERMANY ▶ FRANCE ▶ UK ▶ SWEDEN ▶ BENELUX ▶ POLAND ▶ ITALY ▶ SPAIN ▶ NORWAY  
▶ DENMARK ▶ FINLAND ▶ SWITZERLAND ▶ CZECHIA ▶ HUNGARY ▶ CIS ▶ CHINA ▶ JAPAN ▶ KOREA

▶ Visit our home page at: <http://www.pep.com>

**Benelux**  
PEP Modular Computers Benelux  
Koning-Albert-Laan 46  
B-1780 WEMMEL  
Tel.: ++32 (0)2 456 06 40  
Fax: ++32 (0)2 461 00 31

Postbus 9712  
NL-4801 LV BREDA  
Tel.: ++31 (0)76 5217 957  
Fax: ++31 (0)76 5217 959

**France**  
EURO PEP Paris  
Les Bureaux du Manoir  
18 Chemin du Fond du Chêne  
F-78 620 L'ETANG LA VILLE  
Tel.: ++33 (0) 1 39 16 10 30  
Fax: ++33 (0) 1 39 16 10 25

**Great Britain**  
PEP Modular Computers (UK) Ltd.  
Riverside Business Centre  
SHOREHAM-BY-SEA  
BN43 6RE  
Tel.: ++44 (0) 1273 44 11 88  
Fax: ++44 (0) 1273 44 11 99

**Korea**  
PEP-Dasan Systems  
2F Seahun Bldg.  
162-1 Samsung-dong  
Kangnam-ku  
Seoul 135090  
SOUTH KOREA  
Tel.: ++82 (0) 25 58 08 38  
Fax: ++82 (0) 25 55 08 39

**Poland**  
PEP Modular Computers Sp. z o.o.  
Al. Jerozolimskie 144  
Pok 714 Vp  
02-305 WARSZAWA  
Tel.: ++48 (0) 2 28 23 55 73  
Fax: ++48 (0) 2 28 23 55 73

**Sweden**  
PEP Modular Computers AB  
Hornackersvägen 8  
Box 1430  
S-18314 TÄBY  
Tel.: ++46 (0) 8 756 72 60  
Fax: ++46 (0) 8 732 63 10

**USA**  
PEP Modular Computers Inc.  
750 Holiday Drive, Building 9  
Pittsburgh, PA 15220  
Tel.: ++1 412 921 3322  
Fax: ++1 412 921 3356  
Toll free: 800/228-1737



PEP Modular Computers GmbH  
Apfeltrangerstr. 16  
D-87600 KAUFBEUREN  
Tel.: ++49 (0) 8341 803 0  
Fax: ++49 (0) 8341 803 499