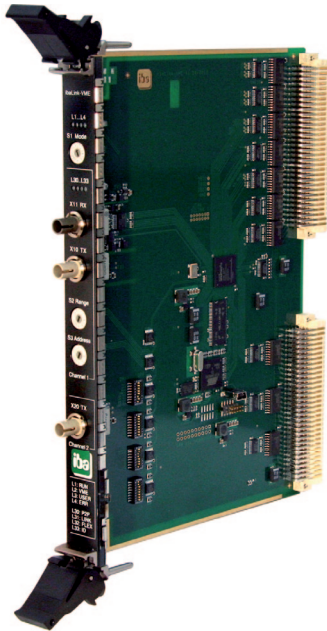# ibaLink-VME

In brief

- Connection of VME based PLC systems to ibaPDA-V6 or ibaLogic
- Backwards compatible to ibaLink-SM-128V-i-2o
- Can be used in all common VME32 and VME64 systems
- Bidirectional fiber optic link for analog and digital inputs and outputs
- Unidirectional fiber optic link for analog and digital outputs or diagnosis
- Supported ibaNet protocols: 3Mbit, 32Mbit and 32Mbit Flex
- Flexible setting of data rate, data size and formatting with 32Mbit Flex
- Different operation modes (cascading, peer-to-peer-mode)
- Power supply via VMEbus
- Fast data transfer due to Dual Port RAM technology
- Block consistent mode

Description

The ibaLink-VME card can be used to connect VME based PLC systems via fiber optics to the data capturing system ibaPDA-V6 or the Soft-PLC ibaLogic in order to transfer measured data.

ibaLink-VME is the successor of the ibaLink-SM-128V-i-2o card and completely compatible with the previous functions in 3Mbit mode. Moreover ibaLink-VME offers new functions using the ibaNet protocols 32Mbit and 32Mbit Flex.

ibaNet protocols

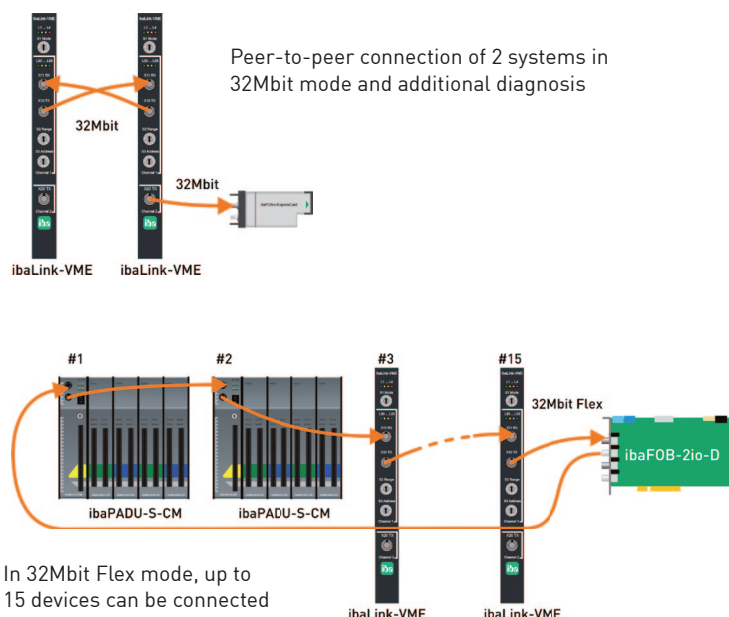Depending on the ibaNet protocol the card supports different applications:

- **3Mbit**: This mode is compatible with the predecessor ibaLink-SM-128V-i-2o. Cascading of up to 8 devices is possible on the input and output (I/O extension for PLC systems) and 2x 64 analog + 64 digital values can be transmitted with a fixed rate of 1 ms.

- **32Mbit**: Two VME systems can be coupled in peer-to-peer mode. On the 2nd diagnostic output parallel measuring with ibaPDA is possible. The update rate can be adjusted between 50 µs and 1.4 ms.

- **32Mbit Flex**: This mode provides the highest flexibility for data exchange with ibaPDA, since transmission rate, size and formatting of data can freely be set. For small amounts of data the cycle time can be faster, up to 25 µs with 65 bytes. The maximum amount of data is 4060 bytes at 1.4 ms. Moreover, with 32Mbit Flex, it is possible to connect up to 15 devices in a ring topology.

Supported VME systems and modes

The ibaLink-VME can be used in both VME32 and VME64 systems. The card occupies 256 kbyte of VME addressing space. The address can be configured using DIP switches. The following modes of VME access are supported:

- Addressing modes A24, A32, A40, A64 with data formats 8/16/32 bit (D08/D16/D32/MD32)
- 8/16/32/64 block transfer modes (BLT/MBLT)

When consistency of a complete data block is needed, a special „consistency mode" could be enabled by setting a DIP switch.

Peer-to-peer connection of 2 systems in 32Mbit mode and additional diagnosis

In 32Mbit Flex mode, up to 15 devices can be connected

Short Description	
Name	ibaLink-VME
Description	System interface module for VME-based PLC systems
Order number	14.132000
FO connections	
Communication channels	Channel 1: input and output Channel 2: output
ibaNet protocols	3Mbit, 32Mbit, 32Mbit Flex
FO cable	62,5/125 µm or 50/125 µm Multimode
Fiber optic connector type	ST plug
FO cable length	Max. 2000 m, without repeater
Power supply and indicators	
Power supply	5 V via VMEbus
Current consumption	Max. 1 A / 5 V
Indicators	4 LEDs for operating status 4 LEDs for channel status
Operating and environmental conditions	
Cooling	Passive
Installation	1 slot in standard VME chassis
Operating temperature	32 °F...122 °F (0 °C to 50 °C)
Storage temperature	-13 °F...158 °F (-25 °C to 70 °C)
Transport temperature	-13 °F...158 °F (-25 °C to 70 °C)
Dimensions and weight	
Dimensions (W x H x D) Front panel (W x H)	1 VME slot x 9.2 in x 6.3 in (1 VME slot x 233 mm x 160 mm) 4HP x 6U
Weight (incl. package and documents)	Approx. 1.1 lbs (0.5 kg)

CE

Measurement and Automation Systems