



Meinberg Funkuhren

Lange Wand 9

31812 Bad Pyrmont, Germany

Phone: +49 (5281) 9309-0

Fax: +49 (5281) 9309-30

<https://www.meinbergglobal.com>

info@meinberg.de

IMS-BPE: Basic Port Expansion - IMS Module for Standard Output Signals

This product is only compatible with Meinberg's line of modular **IMS LANTIME** systems.

Visit the [1][IMS Information Page](#) to learn more.

Meinberg's new BPE8000 series will gradually replace the previous series of our Basic Port Expansion modules. Compared to the preconfigured 2000 series modules, the 8000 series provides flexible and customizable configuration of output signals at the physical connectors of the modules. There are eight variants available, offering different BNC and ST connection combinations.

With the new generation of BPE modules, the output signals can be selected via the web interface. An electronically controlled switch (multiplexer) on the module board allows the selection of signals distributed by the receiver module via the backplane. This not only provides the possibility to flexibly distribute the output signals to the existing physical connections, but also achieves a high degree of utilization of the modules, since no hardware update or an upgrade of the IMS system by further modules is required in case of new requirements by the application environment.

Key Features

- Large variety of output signals and programmable pulses: 10 MHz, TC-DCLS/-AM, 2.048 MHz, TTL, PPS, PPM, PPH ...
- Flexible configuration of output signals through the web interface of your IMS system (BPE8000 series)
- Pre-configured BPE modules with fixed outputs available (BPE2000 series)

Description

BPE8000 Series

The BPE8000 series with eight different BNC and ST connection combinations provides flexible configurations of output signals through the web interface of your IMS system. As requirements of application environments change, flexible and customizable combinations of output signals can easily be set up. An electronically controlled switch (multiplexer) on the module board allows the selection of signals distributed by the receiver module via the backplane.

BPE ModuleConnectorsSignal Outputs

BPE80004x BNC femaleTTL

BPE81004x STFiber Optic - Multimode

BPE82002x ST, 2x BNC female2x Fiber Optic - Multimode, 2x TTLBPE82502x ST, 2x BNC female2x Fiber Optic - Multimode, 1x TTL, 1x Modulated Time Code (TC-AM)

BPE83004x STFiber Optic - Singlemode

BPE8400:2x ST, 2x BNC female2x Fiber Optic - Singlemode, 2x TTL

BPE85004x ST2x Fiber Optic - Multimode, 2x Fiber Optic - Singlemode

BPE86004x BNC female2048 kHz (ITU G.703-15 - 75 Ohm unbalanced) *

BPE87004x BNC female3x TTL, 1x Modulated Time Code - TC-AM **

*Fixed outputs, no signal selection possible

**BNC sockets Out 1 - Out 3 are freely programmable, Out 4 is permanently set to TC-AMBPE2000 Series

From the previous 2000 series of our preconfigured BPE modules with fixed outputs, the following variants are still available:

BPE ModuleConnectorsSignal Outputs

BPE20164x BNC female4x Progr. Pulses PA

BPE20254x BNC female4x 5 MHz Sine Wave

BPE23522x BNC female, 1x 3 pin DFK1x TCA DCLS, 1x TC AM, 1x Relay Out

BPE25004x 2 pin DFK, 1x BNC female4x Progr. Pulses PhotoMOS, 1x TC AM

Specification of signal levels:

- * PA: 10 Vpp into 50 Ohm
- * 5 MHz / 10 MHz: 1 Vpp (5 dBm) into 50 Ohm
- * 2048 kHz: 1 Vpp into 120 Ohm
- * TC AM: 3 Vpp (mark) / 1 Vpp (space) into 50 Ohm
- * TCA DCLS: 5 V / 250 mA
- * TTL: 2.5 V into 50 Ohm
- * Optocoupler: UCE max = 55 V, IC max = 50 mA, Ptot = 150 mW
- * PhotoMOS: 250 V AC/DC, 150 mA
- * Relay Out: AC 1 A (250 V); DC 0.1 A (250 V) / 1 A (30 V)
- * Fiber Optic - Multimode: 850 nm, 15 µW min.
- * Fiber Optic - Singlemode: 1310 nm, 30 µW min.

Characteristics

Status Info	LED Status Indicators
	<ul style="list-style-type: none"> * LED St: BPE Status * LED In: Status of the backplane's output signals * LED A: BPE status - output signals (1 + 2) * LED B: BPE status - output signals (3 + 4)
Operating Voltage	+5 V DC
Current Draw	5 V +5%, 150 mA
Supported Temperature	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	Max. 85 % (non-condensing) at 40 °C
Warranty	Three-year warranty
RoHS Status of Product	This product is fully RoHS-compliant.
WEEE Status of Product	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

Manual

There is no online manual available for this product.: [2][Contact us](#)

Links:

[1] <https://www.meinbergglobal.com/english/products/modular-sync-system.htm>

[2] <mailto:info@meinberg.de>