# PCS45/PCL45USB **CONFIGURATOR** FOR MTL CONVERTERS

The PCS45/PCL45USB configurator allows MTL converters to be configured from a standard PC running a Microsoft® Windows® operating system. It comprises PC software, provided on a CD (PCS45), and an ATEX certified interfacing link (PCL45USB). Converters can be configured from the safe area, while on-line, and configurations can be saved to disk and printed out when required. It is suitable for use with MTL4000, MTL4500, MTL4600, MTL5000 and MTL5500 range of products.

#### **SPECIFICATION**

# PCL45USB hardware

#### Location

Safe area

#### Connections

PC side: USB B(F) socket

Converter side: cable with 3.5mm jackplug, 3-pole for MTL4500, MTL4600 and MTL5500 range of converters. An adapter cable is provided for other earlier MTL converters.

#### Cable lengths

Converter side (fitted): 1.5m

USB cable A(M) to B(M) (supplied): 2m

#### Ambient temperature limits

-10°C to +60°C operating

-20°C to +70°C storage

#### Humidity

5 to 95% relative humidity (non-condensing)

#### Weight

200g

#### **PCS45 Configuration software**

Compatible with Windows 2000 or Windows XP. Consult MTL for operation with any other operating system, e.g. Windows Vista™.

#### Software medium

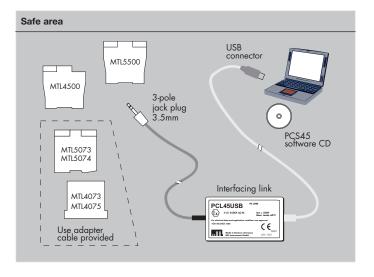
PCS45 supplied on CD

Updates are available at www.mtl-inst.com

# Recommended minimum PC configuration

Microsoft Windows 2000 or Windows XP 20MB of available hard disc space CD ROM drive Available USB port

Printer (local or network)





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# CUSTOM, STANDARD AND UNIVERSAL BACKPLANES FOR EASY DCS INTEGRATION

- Total flexibility
- Special functions
- Reduce wiring
- Signal conditioning
- Simplify installation
- HART® integration

The MTL4500/MTL4600 range of backplanes, enclosures and other accessories provide comprehensive, flexible and remarkably compact mounting facilities for system vendors, original equipment manufacturers and end users alike.

#### **CUSTOMISED BACKPLANES**

Eaton provides a complete design and manufacturing service for MTL customised backplanes. Customised backplanes give the vendors and users of process control and safety systems the opportunity to integrate MTL4500/MTL4600/HART® modules directly into their system architecture. As there are no hazardous-area circuits on the backplanes, customised versions can be produced without the need for IS certification, so simplifying design and lowering costs.

#### **UNIVERSAL CUSTOM BACKPLANES**

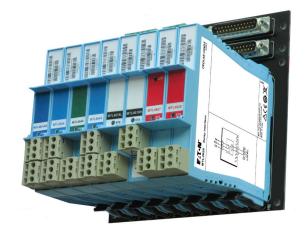
The 'universal' backplane allows a fast and economic approach to providing a custom interface. Where tight time schedules exist, the backplane can be installed to allow the panel building and wiring to be completed. The customised adapter card can then be plugged in at any time up to integrated test.

#### **ADAPTER CARDS**

Adapter cards already exist for many of the DCS companies. In addition there is a range of general purpose cards that offer reduced wiring for use with specific MTL modules. These are also available in left- and right-hand versions to ease panel wiring.

# **STANDARD MTL BACKPLANES**

Standard MTL backplanes are available to accommodate 4, 8, 16, or 24 modules using screw-clamp connectors for the safe-area circuits. On an individual backplane, any module can be plugged into any position and module types can be mixed. For 8-, 16- and 24-way backplanes, screw-clamp connectors which plug into the backplanes provide primary and secondary 24V dc power supplies. Power to several 8- or 16-way backplanes can be interconnected to reduce and simplify wiring – see instruction manual INM4500/INM4600 for details.



#### **OPTIONAL ACCESSORIES**

Optional accessories include colour coded tagging strip kits for all three sizes of backplane and earth rail kits for 8 and 16-way versions. Mounting accessories are available for surface (all backplanes), T-section and G-section DIN-rail (8- and 16-way versions), and a horizontal plate for mounting 24-way backplanes in 19-inch racks.

#### **WEATHERPROOF ENCLOSURES**

Weatherproof enclosures are available for applications where separate safe-area enclosures are required for backplanes with modules. Available to accommodate one 4-way or one 8-way backplane, they are manufactured from GRP giving protection against dust and water to IEC529:IP65. The lids are made from transparent high-strength polycarbonate so that LEDs, switches, etc, on the tops of the modules are easy to see.

#### DCS VENDORS/SYSTEMS SUPPORTED:

**ABB Automation** 

S100, INFI90, S800

**Emerson** 

Delta V, M Series, S Series

**GE Bently-Nevada** 

HIMA

HIMax

Honeywell

PMIO, C200, C300, UPIO, Safety Manager, USIO

**Rockwell Automation** 

ICS Triplex, Plantguard

#### **Schneider Electric**

Foxboro I/A, Triconex Trident/Tricon, Modicon

Siemens

ET200, S7

Yokogawa

Centum R3, VP, Prosafe RS, CS3000

#### MTL CPS STANDARD BACKPLANES

			MOUNTING KITS			ACCESSORIES		
Backplane model no.	Number of modules	Safe-area connections	Surface	DIN-rail (T or G)	19-inch rack	Earth–rail kit	Tagging strip kit	Spare fuse pack
CPS04	4	Screw-clamp	SMS01	DMK01	-	_		FUS1.0ATE5
CPS08	8	Screw-clamp	SMS01	DMK01	_	ERK08	TSK08	FUS1.0ATE5
CPS16	16	Screw-clamp	SMS01	DMK01	_	ERK16	TSK16	FUS2.0ATE5 or FUS2.5ATE5
CPS24	24	Screw-clamp	SMS01	DMK01	HMP24	_	TSK24	FUS4.0ATE5



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Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283 E-mail: mtlenquiry@eaton.com www.mtl-inst.com © 2016 Eaton All Rights Reserved Publication No. EPS45-46 backplane Rev 6 010916 EUROPE (EMEA):

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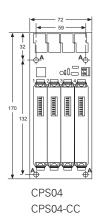
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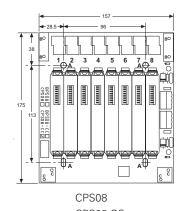
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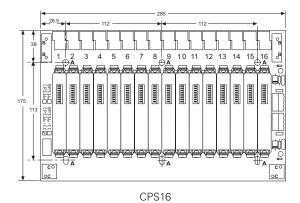
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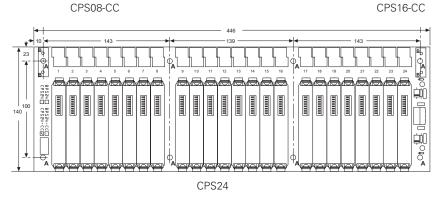
#### **CPS BACKPLANE DIMENSIONS (mm)**







-CC - Conformal Coating



## Power requirements, Vs

21V dc to 35V dc through plug-in connectors

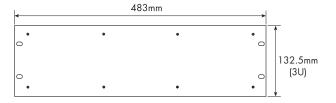
#### Safe-area connections

CPS: 2.5mm<sup>2</sup> screw-clamp terminals – 6 positions per module

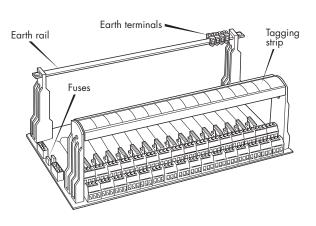
# Weight (without modules or accessories)

CPS04: 96g CPS08: 225g CPS16: 419g CPS24: 592g

#### HMP24 - 19" RACK MOUNTING PLATE FOR CPS24



#### **BACKPLANE ACCESSORIES**



## SCK45 - backplane clips



MCK45 - backplane clips





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#### **ORDERING INFORMATION**



#### MTL4600 range of isolators

Specify part number: eg, MTL4611

#### Individual isolator identification

TH5000 Tag holder (Pack of 20)

Connectors - MTL4600

**SAF-CJC** Field plug, terminals 1 and 3 with

cold-junction sensor

**SAF-CJC2** Field plug, terminals 4 and 6 with

cold-junction sensor

SAF1-3 System plug, terminals 1, 2 and 3 SAF4-6 System plug, terminals 4, 5 and 6



#### MTL4500/4600 Standard Backplanes

CPS04 4-way backplane screw-clamp connector
 CPS08 8-way backplane screw-clamp connector
 CPS16 16-way backplane screw-clamp connector
 CPS24 24-way backplane screw-clamp connector

#### MTL4500/4600 Custom Backplanes

Contact MTL for options and advice



# MTL4500/4600 Backplane mounting accessories

**DMK01** DIN-rail mounting kit, T- or G-section

(pack of 40)

8-way backplanes require 4, 16-way backplanes require 6

**SMS01** Surface mounting kit (pack of 40)

4- and 8-way backplanes require 4, 16-way backplanes require 6, 24-way backplanes require 8

**HMP24** Horizontal mounting plate and screws for

19-inch rack mounting24-way backplanes only

BMK08 Mounting kit for one 4- or 8-way backplane
BMK16 Mounting kit for one 16-way backplane

#### MTL4600 Backplane accessories

ERK08Earth rail kit for CPS08 backplaneERK16Earth rail kit for CPS16 backplaneTSK08Tagging strip kit for CPS08 backplaneTSK16Tagging strip kit for CPS16 backplaneTSK24Tagging strip kit for CPS24 backplaneFUS1.0ATE5Fuse kit for 4- and 8-way backplanes,

(10 per pack)

FUS2.0ATE5 Fuse kit for 16-way backplane,

(10 per pack)

FUS4.0ATE5 Fuse kit for 24-way backplanes,

(10 per pack)

MCK45 MTL4000 backplane conversion kit

(16 clip pairs per pack)

**SCK45** Module 4-clip strips

(10 strips + 40 rivets per pack)

Module position label (blank)

(50 per pack)



Literature

MPL01

INM4500 MTL4600 range instruction manual

#### Configurator and software

**PCL45USB** Configurator, PC interface and software

PCS45 PC software

Please go to our website at www.mtl-inst.com for the latest information.

