

Compact Embedded Solution

EtherCAT module for analog or Pulse & Direction axis control

Bridge converts CNC EtherCAT commands into the signals required by analog or Pulse & Direction servo drives, while integrating encoder feedback, I/O and spindle control.

Bridge is an EtherCAT slave device that combines axis interfaces with a comprehensive set of analog and digital I/Os in a single module.

The name “Bridge” reflects its function: converting EtherCAT commands received from the CNC into the signals required by analog or Pulse & Direction servo drives.



4 or 6 axes

Dedicated versions for controlling four or six axes with incremental encoder feedback.

Analog or P&D

±10 V analog axis outputs or Pulse & Direction signals to interface with existing drives.

Integrated I/O

32 or 64 digital inputs, 32 or 64 digital outputs and four analog inputs.

Why choose Bridge

-  Reduces the number of components and simplifies control-cabinet wiring.
-  Allows existing analog or Pulse & Direction servo drives to be retained or reused during retrofit projects.
-  Integrates axis encoder inputs, handwheel input and spindle output for complete, consistent machine control.
-  Particularly suitable for 3- or 5-axis machines, including gantry configurations.
-  Provides protected outputs and standard 24 VDC power supply.

**bridge**_{no}

Product specifications

Four configurations allow selection of the axis command technology, number of controlled axes and I/O capacity best suited to the machine.

CHARACTERISTICS	A-432 4	P-432 4	A-664 6	P-664 6
P/N	2SMPM5991/0C	2SMPM6214/0C	2SMPM5992/0C	2SMPM6215/0C
Axes Number and type	4 analog ±10V	4 P&D	6 analog ±10V	6 P&D
Axes feedback	Incremental encoder			
Digital Inputs (DI)	32		64	
Digital Outputs (DO)	32		64	
Digital Output current	0.25 A / 0.5 A per channel; 4 A max. per 16-output connector group			
DO short circuit protection	YES			
Analog Output (AO)	2 x 16 bit	-	-	-
Spindle Output	1 Analog output			
Analog Output type	±10V			
Analog Output resolution	16 bit			
AO short circuit protection	YES			
Analog Inputs (AI)	4 x 12 bit			
Analog Input type	±10V differential			
Analog Input Bandwidth	300 Hz			
Handwheel Input	1 x encoder ABZ			
Module Power Supply	24 VDC			
DO power supply	24 VDC			
Operating Temperature	0°C ... +50°C			
Relative Humidity	90% no condensing			
Degree of protection	IP20			

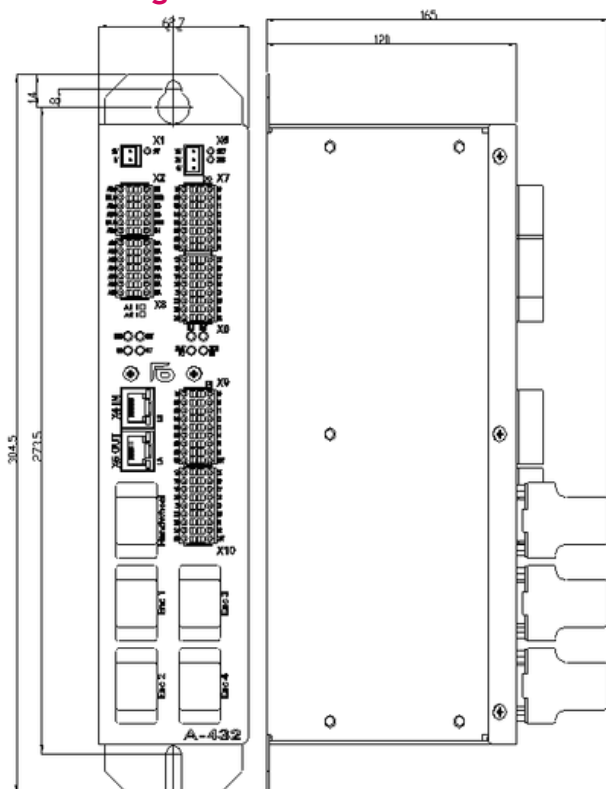


bridge
i/o

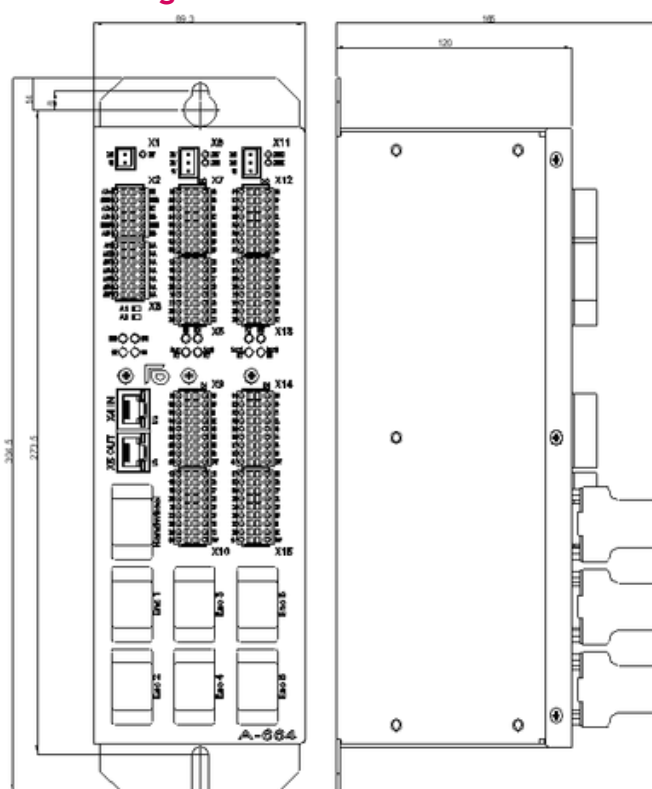
Mechanical Dimensions

Bridge- unit: mm

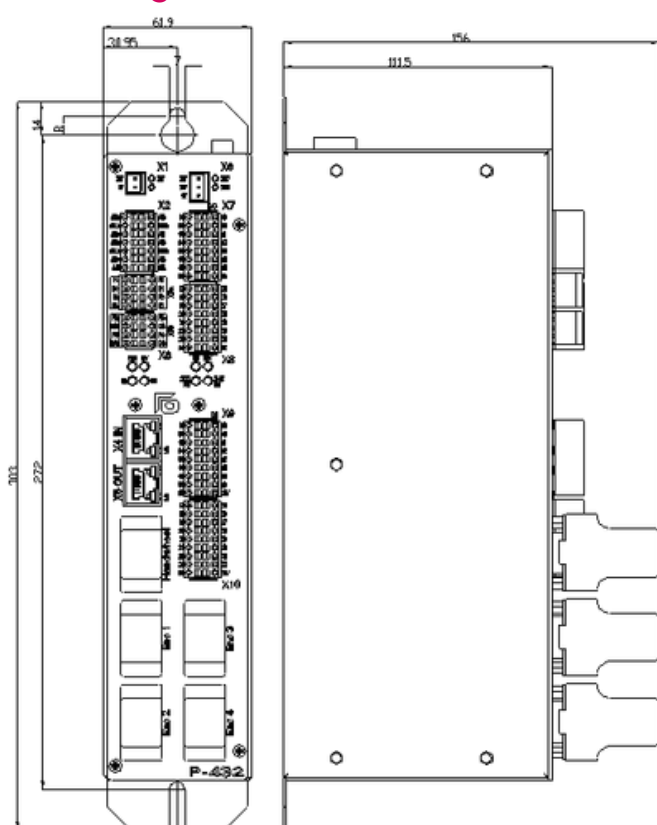
Bridge A-432



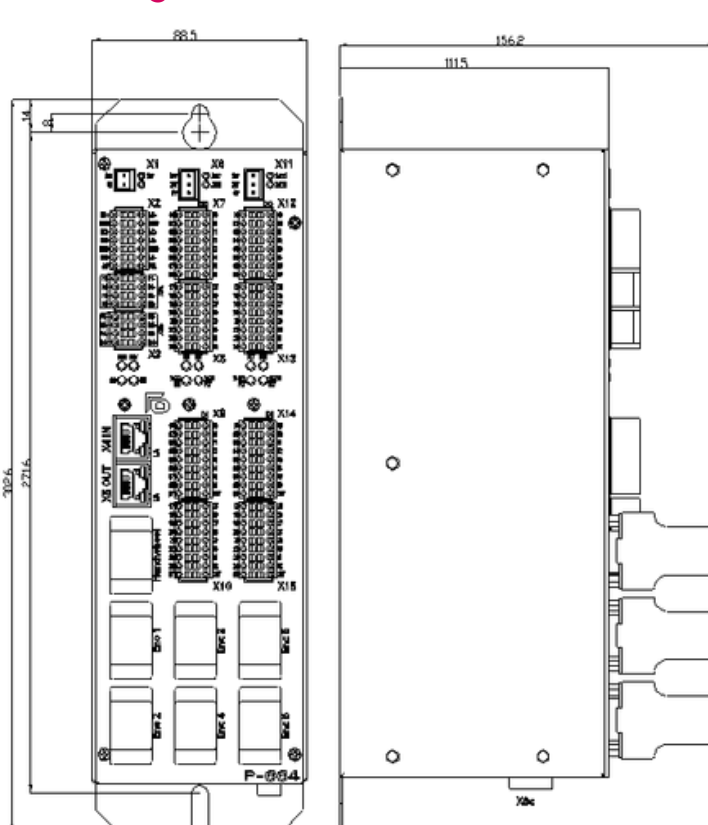
Bridge A-664



Bridge P-432



Bridge P-664



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