Manufacturer/Distributor: **COSMO** TECHS FACTORY AUTOMATION TECHNOLOGIES **COSMOTECHS CO., LTD.**

The Multifunction motion controller
PXRP-3216CN / CSRC-32CN-RP

The Controller that fused hardware's high speed and software's flexibility

Compatible with USB
CSRC-32CN-RP

Pulse generator software **'PGS'**
● Motion arithmetic
● Versatile I/O signal processing
● Other PC side command processing

Compatible with PCI-Express
PXRP-3216CN

RTEX Control
● Position control
● Servo parameter
● Versatile I/O signal
● ADC DAC etc.

Pulse train control
● Motion LSI control
● Versatile I/O signal

Features

1 Enhancing of motion function and software processing speed

The existing product needed waiting time between PC and controller, because of the processing related to control is controlled on PC dependently. However, this product process high speed in "PGS", even when complex control and function. You can share software with EtherCAT products except for difference in hardware function and communication standards.

2 Common software and selectable control method

CSRC-32CN-RP and PXRP-3216CN operate with the same software developing environment. These can use with PCI Express and USB (e.g., laptop), therefore you can choose product adjusted to device environment.

3 Pitch error correction

It is the function that correct pitch errors by positioning that adding correction amount to command position when driving controlled axis, in advance have measured regular interval pitch error of a transmission mechanism (e.g., screw).
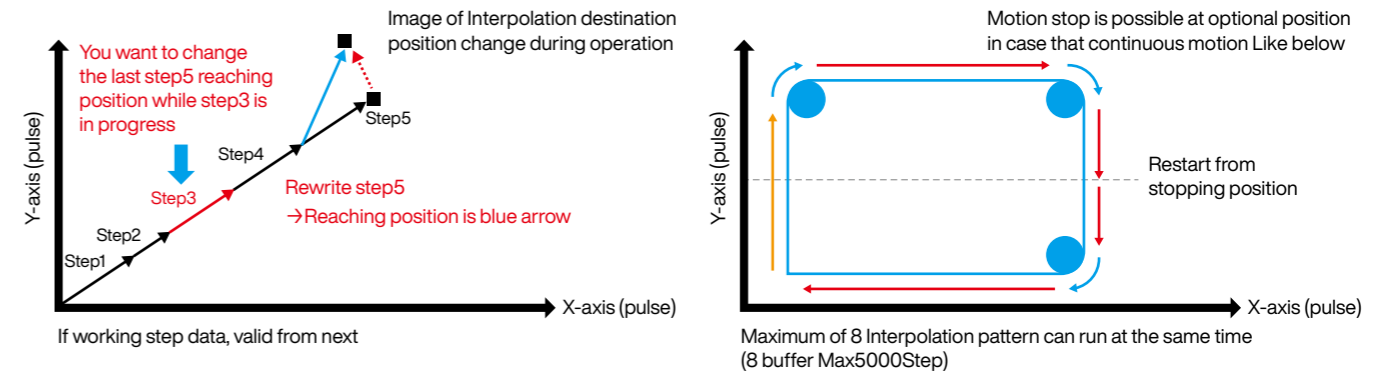
4 Compatible with wide variety devices

It is compatible with devices that needed for the device operation such us RTEX supported servo, in-house input/output board, stepper driver, Analog converting board, Digital converting board, and high-speed digital I/O board.
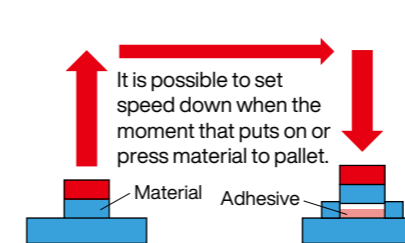
Main functions

Interpolation control: circular and ellipse interpolation, Helical interpolation, and third dimension interpolation function

Up to 5000 steps of interpolated data can be recorded in "PGS", change interpolation data in working, revise and interpolate reached position, and pause interpolation motion are possible. Also restart from paused position and exchange interpolation axis (XY-axis → XZ-axis) are possible.
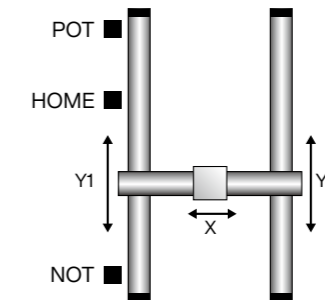

Image of Interpolation destination position change during operation

You want to change the last step5 reaching position while step3 is in progress

Rewrite step5 →Reaching position is blue arrow

If working step data, valid from next

Motion stop is possible at optional position in case that continuous motion Like below

Restart from stopping position

Maximum of 8 Interpolation pattern can run at the same time (8 buffer Max5000Step)

High-accuracy synchronous · (axis)interlocking function · Gantry control · Soft landing function
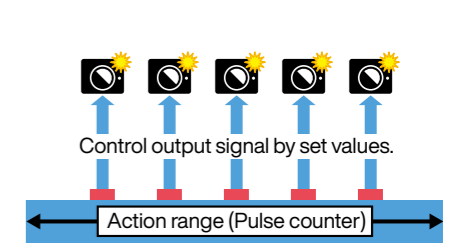
Overshoot at a stop such as bonding machine may cause clash and damage to parts, but the soft-landing function suppresses overshoot when stopping, protecting machines, materials, and workpieces.

We provided gantry control as basic function. This function applies axis interlocking functions, and by setting Y2-axis as interlocked axis of Y1-axis, Y2-axis automatically track by needing only to send operation to unit Y1-axis.

You can set output signal that can use for flipping ON/OFF of strobe and sensor to Motor position information.

It is possible to set speed down when the moment that puts on or press material to pallet.

Material   Adhesive

Control output signal by set values.

Action range (Pulse counter)

Others

● RTEX 32-axis control is possible. In addition, PXRP-3216CN can control four pulse train axis, total 36-axis can control.
● Speed, acceleration, deceleration can set in 1 pps between 1 pps~400 Mpps.
● By the Worktable (X, Y, Z) interlock to encoder information of conveyor, complex action is possible without stopping motion axis
● Use versatile input as trigger signal, and it can use for motion start and synchronous control set in advance.
● The cam axis control function can choose from 6 types of cam ark, Constant Acceleration / Harmonic / Cycloid / Modified Trapezoid / Modified Sine / Modified Constant Speed.

Sales area
● Japan   ● China

Language
● Japanese

For more information

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