

Pulse Generating Controller | PGC-04-U

RoHS

CE

4-axis pulse generator type controller that can be connected to the various motor drivers.

- External control with USB and Ethernet interfaces are available.
- Can be manually operated by a Handy Terminal (JS-300, JB-400, JD-100).



Guide

- ▶ Sample programs are available for download from our website.
 - SG Sample 32/64-bit version for Windows® (only for RS232C)
 - Lab VIEW for RS232C (for v.2014/v.2015)

Attention

- ▶ Cable and motor driver are sold separately. Please purchase 5-phase stepping motor drivers MC-S0514ZU or prepare compatible driver of customer choice.
- ▶ Power supply is DC+24V 2A. You need to purchase the PAT-001-POW1 (AC adapter) or prepare an adapter separately.

| Products Name | Part Number |
|-----------------------------|---------------------|
| Pulse Generating Controller | PGC-04-U |
| Joystick Terminal | JS-300 |
| Jog Operation Box | JB-400 |
| Jog Dial | JD-100 |
| AC Adapter | PAT-001-POW1 |

Primary Functions

| | |
|--------------------------------|--------|
| Controller Function | ○ |
| Number of Control Axes | 4 |
| Stored Program Control | ○ |
| Feedback Control | — |
| Circular Interpolation Control | ○ |
| Linear Interpolation Control | 3 axes |
| Driver Function | — |
| Micro-step (Max. Division) | — |
| Driving Current (A/phase) | — |

General Specifications

| | |
|-------------------------------|--------------------------------------|
| Power Voltage | DC24V |
| Power Consumption | 1.4A |
| Operating Temperature | 5 – 40°C |
| Storage Temperature | –20 – 60°C |
| Ambient Humidity | 20 – 80%RH (without condensation) |
| External Dimensions (W×H×Dmm) | 180×140×60 |
| Weight (kg) | 1.3 |

Interface

| | |
|----------|---|
| GP-IB | — |
| RS232C | — |
| USB | ○ |
| Ethernet | ○ |

Optional

| | |
|---------|---|
| CJ-200A | — |
| JS-300 | ○ |
| JB-400 | ○ |
| JD-100 | ○ |
| SJT-02 | — |

Performance Specifications

| | |
|-------------------------------------|-------------|
| Coordinate Indication Range | — |
| Max. Travel to Set | 134,217,727 |
| Max. Driving Speed (pps) | 4,000,000 |
| Min. Driving Speed (pps) | 1 |
| Acceleration/Deceleration Time (ms) | 1 – 1,000 |

I/O Specification

| | |
|------------------------|----------|
| Origin Sensor | ○ |
| Proximity Sensor | ○ |
| CW (+) Limit | ○ |
| CCW (–) Limit | ○ |
| General Purpose Input | 4 points |
| General Purpose Output | 4 points |
| Control Input | — |
| Control Output | — |
| Trigger Output | — |

Control Command

| | |
|--------------------------------|---|
| Machine Origin Return | ○ |
| Theoretical Origin Setting | ○ |
| Relative Position Drive | ○ |
| Absolute Position Drive | ○ |
| Jog Operation | ○ |
| Position Appointment | — |
| Circular Interpolation Control | ○ |
| Linear Interpolation Control | ○ |
| Drive | — |
| Deceleration Stop | ○ |
| Emergency Stop | ○ |
| Speed Setting | ○ |
| Motor Free/Hold | ○ |
| Port Input | ○ |
| Port Output | ○ |

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Opto-Mechanics

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AC Servo Motor

Cables

Piezo

X Translation

Theta Rotation

Goniometer

Vacuum

Options

40 × 40 mm

60 × 60 mm

80 × 80 mm

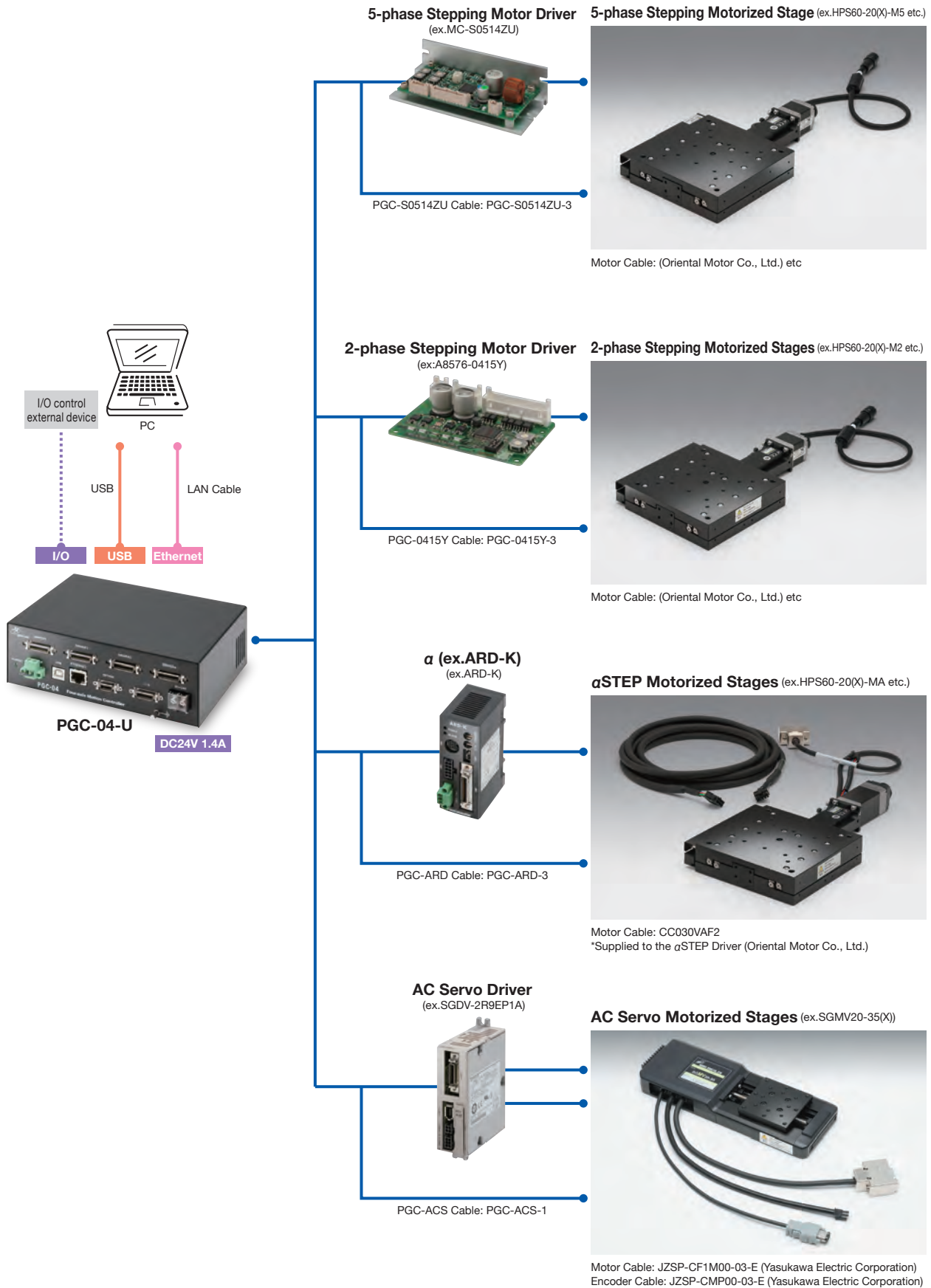
85 × 85 mm

100 × 100 mm

120 × 120 mm

Others

System Diagram



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