MOTOMAN
YRC1000micro
Industrial Robot Controller for small MOTOMAN Robots

The MOTOMAN YRC1000micro controller is a controller for small MOTOMAN robots. It provides high performance robot control in a small footprint cabinet. Its performance and functions are optimized for Pick & Place and assembly applications.

Besides the typical Yaskawa functionality, the MOTOMAN YRC1000micro controller includes easy connections to peripheral devices and new high speed and high precision motion control.

It is compatible with the optional “Functional Safety”, which monitors motion range and speed limitations.

KEY BENEFITS

- Compact and lightweight
- High performance
- New motion control
- Minimum installation space
- Easy connections to peripheral devices
- Compatible with “Functional Safety”

www.yaskawa.eu.com
Specifications Controller YRC1000micro

**Configuration**
Open structure

**Dimensions**
425 (W) x 125 (H) x 280 (D) mm – excluding protrusions

**Weight**
10.5 kg (without top mount box)

**Protection class**
IP20

**Cooling system**
Direct cooling

**Ambient temperature**
During operation: 0°C to +40°C
During storage: −10°C to +60°C

**Relative humidity**
90 % max. (non-condensing)

**Power supply**
Single-phase 200/230 VAC (+10 to −15%), 50/60 Hz (± 2%)
Three-phase 220/220 VAC (+10 to −15 %), 50/60 Hz (± 2%)

**Digital I/Os**
External IO (hardware, standard max):
8 inputs / 8 outputs (transistor 100 mA)
Standard signal allocation:
General Purpose IO: 1 input / 1 output
Specific IO: 7 inputs / 7 outputs

**Programming capacity**
JOB: 200,000 steps, 10,000 instructions;
CIO ladder: 1,500 steps

**Expansion slots**
PCL express, 2 slots

**LAN** (Connections to host)
1 (10BASE-T/100BASE-TX)

**Safety category**
4, PLd

---

1 Manipulators operated by single-phase power supply: MOTOMAN GP7, GP8, MotoMINI.
2 If it is necessary to expand the number of points, a field bus board is required

Specifications programming pendant

**Dimensions**
152 (W) x 299 (H) x 53 (D) mm

**Weight**
0.730 kg

**Material**
Reinforced plastics

**Operation device**
Select keys, axis keys, numerical/application keys, mode selector switch with keys (mode: teach, play, and remote), emergency stop button, enable switch, SD card interface device, USB port (1 port)

**Display**
5.7-inch color LCD, touch panel 640 x 480 pixels

**IEC Protection class**
IP54

---

**Programming Pendant (PHG) – ergonomical, light and easy**

- Easy and fast programming
- Several user levels – from operator to safety mode
- Help function
Optimal Industrial Design

- Volume: 21.5 l (GP7/8/12, MotoMini), 33.5 l (HC10DT)

### Manipulator type

<table>
<thead>
<tr>
<th>Region: Europa and Korea (EMC directive required)</th>
<th>GP7</th>
<th>GP8</th>
<th>GP12</th>
<th>MotoMini</th>
<th>HC10</th>
<th>PFL-Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top mount box for CE noise filter: 55 (H) x 280 (D) mm</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
<tr>
<td>Top mount box for CE noise filter: 55 (H) x 280 (D) mm</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
<tr>
<td>Top mount box for CE noise filter: 55 (H) x 280 (D) mm</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
<tr>
<td>Top mount box for CE noise filter: 55 (H) x 280 (D) mm</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
<tr>
<td>Total litres: 21.5 l</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
<tr>
<td>Total litres: 33.5 l</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
<tr>
<td>Total litres: 21.5 l</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
<tr>
<td>Total litres: 33.5 l</td>
<td>GP7</td>
<td>GP8</td>
<td>GP12</td>
<td>MotoMini</td>
<td>HC10</td>
<td>PFL-Card</td>
</tr>
</tbody>
</table>

### Vertically mounted

- Secure the dimensions stated in the placement space chart for cooling and maintenance.
- Use eight holes marked with the symbol “A” to fix the controller on the floor with fixing jigs and anchor bolts.
- When fixing the rack, use A hole (8 places).
- Values refer to version for GP7, GP8, GP12, and MotoMini.