

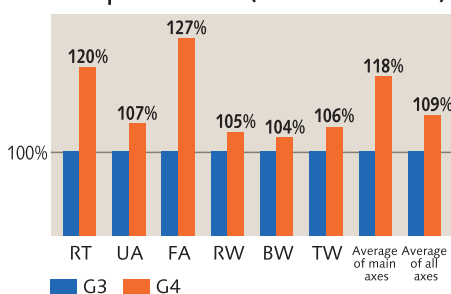
Supporting Factory Optimization Next-Generation Robot Controller



Highly accurate and efficient welding experience

The maximum speed of each axis has improved by up to 27% by fine-tuning acceleration/ deceleration control. The operation algorithm has also been reviewed to improve locus accuracy. These improvements can significantly reduce work losses that affect productivity in demanding workplaces. Further, this helps improve product quality, which is indispensable to business success.

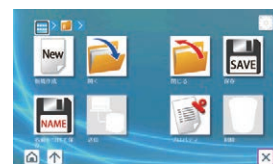
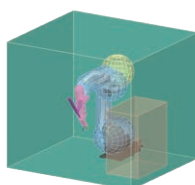
Max speed of 6 axes (in contrast with G3)*



*Example of measurement in our environment when TM-1400 is connected



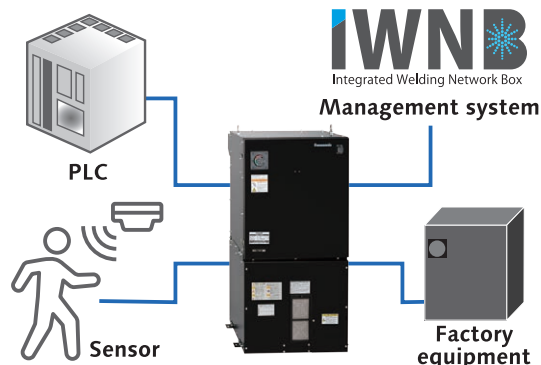
Easier to use with touch panel and 3D display



Equipped with a touch panel with a resolution 1.6 times greater than that of G3, which can be operated with work gloves on, and a 3D engine adopted for the first time, this controller realizes a high-definition 3D display and intuitive operations, therefore making it easier to use.

For manufacturing where everything is connected

The G4 controller realizes various functions not available with G3 by utilizing its high speed and parallel processing capabilities. In particular, the adoption of open communication specifications called OPC UA and software-based functional safety with excellent flexibility are typical examples. Connection with new sensors for safety and other devices for data collection or automation will be made easier without any compatibility restrictions with additional devices or hardware limitations.



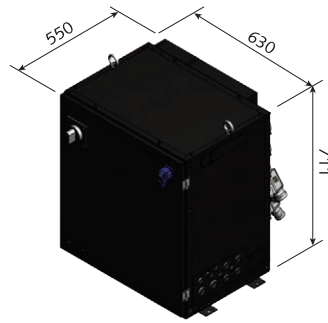
Cables arranged on the back to save space

The primary side input line and connection cables are arranged on the back, and the TP cable is arranged on the front to reduce projections on the side.*

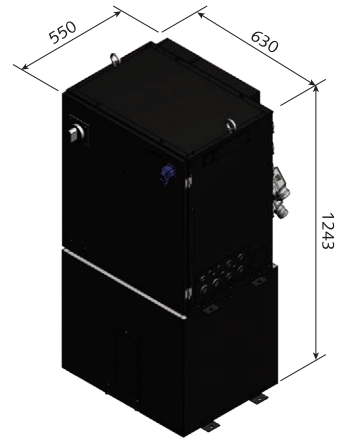
*For external axes 1 to 6. Those for the 7th axis and beyond are arranged on the side.



M-C/built-in external axis cables arranged on the back



G4



WG4

Name	G4	WG4
External dimensions	Width 630 × Depth 550 × Height 711 mm	Width 630 × Depth 550 × Height 1243 mm
Weight	63 kg	141 kg
Memory capacity	40,000 points	40,000 points
Position control method	Software servo system	Software servo system
External memory I/F	TP: SD memory card slot × 1 USB2.0 (Hi-Speed supported) × 2	TP: SD memory card slot × 1 USB2.0 (Hi-Speed supported) × 2
Number of control axes	Simultaneous 6 axes (max. 27 axes)	Simultaneous 6 axes (max. 27 axes)
Input/output signals	Dedicated signal: Input 6 points, Output 8 points General-purpose signal: Input 40 points, Output 40 points Safety input/output: Input 8 points, Output 8 points	Dedicated signal: Input 6 points, Output 8 points General-purpose signal: Input 40 points, Output 40 points Safety input/output: Input 8 points, Output 8 points
Input power supply	3-phase, AC 200 V (±10%), 50 Hz/60 Hz (±2%)	3-phase, AC 200 V (±10%), 50 Hz/60 Hz (±2%)
Input cable	3.5 mm ² (AWG12) or more	14 mm ² (AWG6) or more
Ground cable	8 mm ² (AWG8) or more	14 mm ² (AWG6) or more
Applicable welding method	-	CO ₂ /MAG/Stainless steel MIG Pulse MAG/Stainless steel pulse MIG
Output current	-	30 A-350 A DC
Output voltage	-	12 V-36 V DC
Rated duty cycle (10-minute cycle)	-	CO ₂ /MAG/Stainless steel MIG: 80% Pulse MAG/Stainless steel pulse MIG: 60%

⚠ Safety precautions •Before attempting to use any welding product always read the manual to ensure correct use.

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●Specifications are subject to change without notice.

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