Iron Tip Soldering Robot

In-Line / Unit type

The OMEGA system has been designed exclusively for automated soldering. This soldering unit can be widely adapted for use in semi & fully automated systems, desktop robots, linear actuators and special purpose machines.

The OMEGA is a new soldering unit compatible with MODBUS TCP/IP and Industry 4.0.





Iron Unit RSP



Model
OMEGA-LSP:
Controller and feeder separate type
OMEGA-LCO:
Controller and feeder combined type

Iron unit RSP / RSL-R / RSL-FPR

It takes 8 seconds to replace the iron cartridge and it does not require position adjustment upon iron cartridge replacement.



for point soldering



RSL-R for slide soldering



RSL-FPR for slide soldering

■RSP/RSL-R/RSL-FPR

Type	RSP/RSL-R/RSL-FPR
Weight	0.8kg

Solder feeder LFD

It can control the feeding amount precisely by its pulse motor and the ZSB can be attached as an option.

LFD

Туре		LFD
Solder Feed Motor		Pulse motor
Solder — Wire Diameter — —	Using	Φ0.4 ~ 1.0mm
	ZSB Feeder	(Option: Φ0.3mm)
	Using Normal Feeder	Ф0.3 ~ 1.0mm
	Using Large Diameter Feeder	Φ1.2 ~ 2.0mm
Feed/Revers	se Speed	0.1 ~ 50.0mm/sec
Weight		1.3kg
Diameter ———————————————————————————————————	Using Large Diameter Feeder	0.1 ~ 50.0mm/se

■OMEGA controller

Туре	OMEGA
Solder Condition	297 conditions
	Point:99 / Slide:99 / Special:99
Solder Step	9 Steps(Max.)
Setting Temperature	1~500℃
Heater Capacity	200W (Max.)
Power Source	AC85~264V(Single Phase)
Power Consumption	640W
Dimensions(W \times D \times H)	110×200×280mm
Weight	3.8kg



Simple operation on the Touch Panel

All operations can be done on the touch panel. The LCD shows a simple chart of the iron cartridge temperature on the touch panel, the current temperature change is clear at a glance.

Auto tuning function

Auto tuning function allows the user to easily set the optimal temperature control parameter.

Maintenance mode

It can check the operation of the heater or motor control part and the conditions of each sensor in maintenance mode.

Further, it has an I/O check function and can easily perform the communication check with the host communication side or confirmation when a malfunction occurs.



▲ Operation Screen (Example)



▲ Maintenance Screen (Example)

OMEGA Manager

Special PC Software for OMEGA

With the OMEGA manager, it is possible to monitor and check the controller condition. It receives and sends a variety of process parameters such as temperature data, error occurrence, soldering condition, system parameters, and more. Information such as temperature data can be exported and saved as a CSV file, allowing for simple verification of the soldering condition and cycle time.







▲ Solder Condition Acquisition Screen





▲ Log Setting Screen

