

■ Fiber Laser Welder 1000W **NEW**



ML-6810C

High power CW laser implements smooth surface of welding!

About 35% lower consumption compared with previous model
Available for Active Heat Control™

Features

About 35% lower consumption during the operation.
High power CW laser implements smooth surface of welding.
Available for Active Heat Control with dedicated focusing head. It enables to control the heat in processing area precisely.
Suitable for processing in automotive parts and machine parts that need high quality and high precise welding.

Features

- Improved brightness

Oscillation module is optimised and brightness is improved compared with previous model.

- Dedicated chiller

The pairing with a dedicated chiller is needed to show its maximum ability. Please use chiller that our company provides.

The chiller is delivered with it's water piping, thus a customer doesn't need to prepare it.

Standard Features

Waveform control	☐
Power monitor	☐
Color LCD touch panel	☐
External communications	☐
Fade-in/ Fade-out	☐

- Laser power management

Managing laser power in focal point with power meter (option), contributes to improvement of product quality.

- Active Heat Control™

Changing laser output by heat detection on axis, controls the heat input into processing area precisely.

Suitable for welding, hardening and other application that heat control is important. The dedicated focusing head is needed. (Option)

- Scanning system

Employing the Galvo, implements high speed and high efficiency processing. Enables to show its superior brightness according to dedicated optical component.

- Reflection resistant structure

Equips a structure to restrain the reflection from workpiece, according to original optical design.

Enables vertical emission, according to the structure which is less effect of reflection from workpiece.

- Controlling function

Enables to set up various wave, according to the function.

Implements various way from high speed precise welding to cutting, according to modulation function. (frequency and waveform)

- Saving energy and space

Reduces energy consumption compared with previous machine, according to design optimization.

Ensures wider space to set up machines, according to light and compact design.

- Useful user interface

Large LCD touchscreen allows to input settings easily.

■ Sold separately

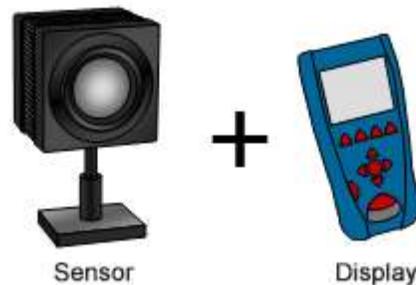
Dedicated chiller

- Please buy the dedicated chiller paired with ML-6811C from us.



Power meter

- To measure the power at focal point is recommended*.



Recommendation/
Equivalent to FL-1100A-BB-65

*Checking at start / final

Available for Japanese and English.
Enables to use an extension cable.

Specifications

Model		ML-6810C
Maximum power		1000W
Mode		Multi mode
Pulse width	REPEAT	Standard:0.1 ~ 500.0ms (0.1ms step)
		Setting switching:0.05 ~ 500.00ms(0.05ms steps)
	CW	Standard:0.1 ~ 1000.0s (0.1s step)
		Setting swichging:0.001 ~ 10.000s (0.001s step), 0.01 ~ 100.00s (0.01s step), 1 ~ 10000s(1s step)
Repeated number of pulse / modulation		1 ~ 1000pps
Modulation function		1 ~ 5000Hz (rectangular wave, triangular wave, sinusoidal wave)
Oscillation wavelength		Fundamental wavelength
Positioning guide beam		Builtin visible larser (red)
Output stability		±2%less (Ambient temperature change+/-5°C in the range), (Water temperature:21to25°C), (Cooling water flow rate18 to 20 L/min), (Irradiation time 8 hrs in the range)
Fiber optic delivery		Single fiber delivery / 2 timesharing
Number of schedule		256
Measurement function		Laser energy (J), Average power (W)

Counter	Displays the total number of outputs (9 digits), Displays the total number of acceptable outputs (9 digits) Displays the total LD ON time (7 digits), Displays the laser output time (7 digits)
Length of the laser controller cable	1m (standard) *Extension is option
Laser controller and language	Touch panel, Removal (Japanese and English are available)
Power supply / Beaker rated current	3-phase, 200-240V AC 50/60Hz / 40A
Power consumption	Maximum:4.0kW / Standby 1.0kW less
Cooling method	Water cooling (21 to 25°C)
Ambient temperature / Ambient humidity	5 to 40°C / 20 to 85%RH (non-condensing)

*1: When the laser power supply cooling water is constant, eight hours

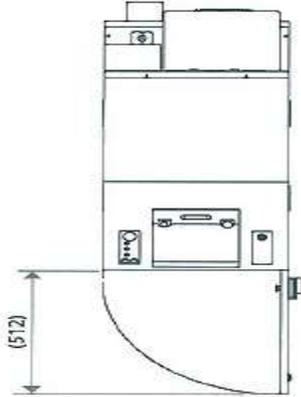
*2: Depends on the branch

*Specifications subject to change without notice.

External View

Dimensions in mm

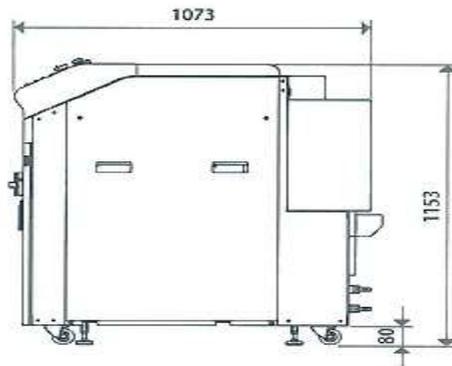
■ ML-6810C/6811C
Top view



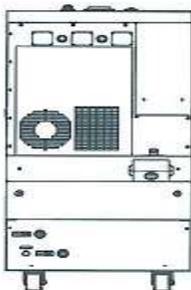
Front view



Right side view



Back view



Left side view

