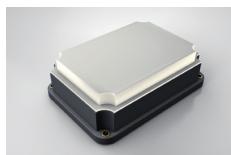


# VL-W1

**The VL-W1 laser welding system with its unique Panasonic fiber laser technology realizes clean and precise plastic welded joints.**



**IN Your  
Future**



# Information about the laser welding system series VL-W1

## Highlights

**3D**

3D-welding per parallel  
laser beam



Variable beam  
diameter



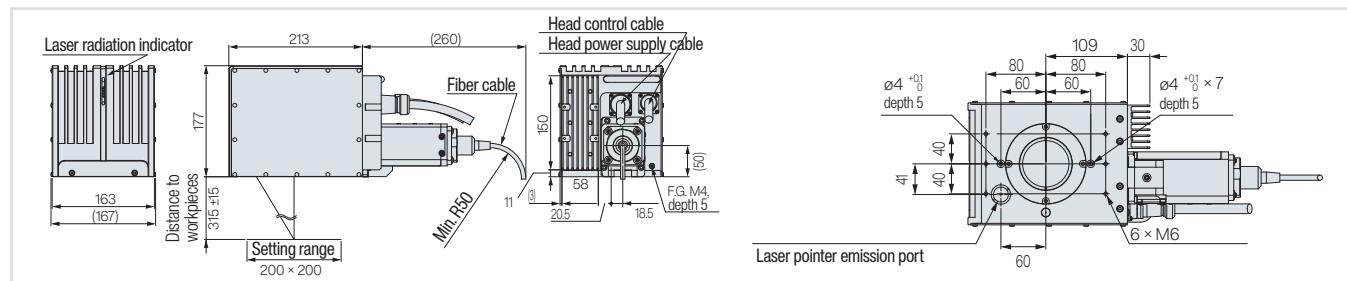
Power correction  
for curves

## Specifications

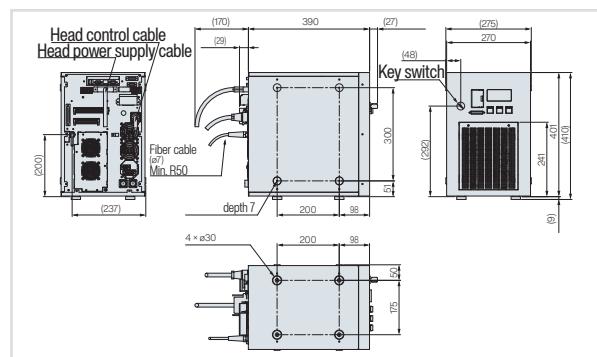
| Item   | Model No.  | Standard  |                       | Large setting range   |                       |  |  |
|--|------------|---|-----------------------|-----------------------|-----------------------|--|--|
|  |            | VL-W1500-N  | VL-W1A00-N            | VL-W1506-N            | VL-W1A06-N            |  |  |
| Laser output power                                     |            | 50W   | 100W                  | 50W                   | 100W                  |  |  |
|  |            | Yb fiber laser; $\lambda = 1070\text{nm}$ , class 4, CW oscillation   |                       |                       |                       |  |  |
| Output power at workpiece                              |            | 45W $\pm 5\%$   | 90W $\pm 5\%$         | 45W $\pm 5\%$         | 90W $\pm 5\%$         |  |  |
| Guide laser, pointer                                   |            | Red semiconductor laser; $\lambda = 655\text{nm}$ ; class 2 laser: Maximum output 1mW or less   |                       |                       |                       |  |  |
| Scanner  |            | Digital galvano scanner   |                       |                       |                       |  |  |
| Setting range (X, Y)                                   |            | 200 $\times$ 200mm  |                       | 400 $\times$ 400mm    |                       |  |  |
| Working distance<br>(base position $\pm$ preset range) |            | 315 $\pm 15\text{mm}$   |                       | 685 $\pm 15\text{mm}$ |                       |  |  |
| Scan speed   |            | Maximum 3000mm/s  |                       |                       |                       |  |  |
| Supplied cable   |            | <ul style="list-style-type: none"> <li>› Head power supply cable: 5.5 <math>\pm 0.1\text{m}</math>, <math>\varnothing 1\text{mm}</math></li> <li>› Head control cable: 5.5 <math>\pm 0.1\text{m}</math>, <math>\varnothing 1\text{mm}</math></li> </ul> |                       |                       |                       |  |  |
| Fiber cable  |            | 5 $\pm 0.2\text{m}$ , $\varnothing 7\text{mm}$ , minimum bend radius: 50mm  |                       |                       |                       |  |  |
| Net weight   | Head       | $\approx 12\text{kg}$   |                       |                       |                       |  |  |
|  | Controller | $\approx 28\text{kg}$   | $\approx 35\text{kg}$ | $\approx 28\text{kg}$ | $\approx 35\text{kg}$ |  |  |
| Degree of protection                                   |            | IP54 (IEC) (only for head section)  |                       |                       |                       |  |  |

## Dimensions

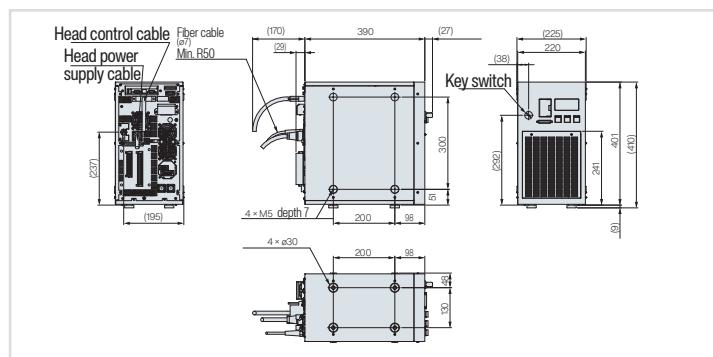
### VL-W1 laser head



### VL-W1500-N / VL-W1506-N controller



### VL-W1A00-N / VL-W1A06-N controller



\* All measurements in mm

