

Irradiation Unit A14132-BD

Features

- Delivers a uniform beam pattern when mounted onto a Direct Diode Laser (DDL) L11585 series
- •Beam pattern ideal for laser quenching and thermal treatment
- Varying beam aspect ratio

Applications

- Metal processing (quenching, cladding)
- Thermal treatment



Outline

When mounted onto a Hamamatsu Direct Diode Laser (DDL) L11585 series, the A14132 delivers a uniform beam pattern ideal for laser quenching and thermal treatment. The A14132 includes an aspect ratio conversion unit and laser focusing unit which can be selected to change the different aspect ratios to adjust the laser irradiation area. A thermometer can be attached by installing an optional coaxial unit, allowing coaxial measurement of the processing point temperature. A coaxial camera and visible pointer can also be added.

Specifications

Parameter	Specifications	
	L11585-02	L11585-04
Maximum light radiant output power	1.8 kW	2.5 kW
Radiant light output power (Typ.)	1.6 kW	2.0 kW
Dimensions (W \times H \times D)	Approx. 116 mm × 116 mm × 292 mm (excluding protuberance)	
Beam spot size	5 mm × 10 mm	
Weight	Approx. 3 kg	
Oscillation mode	CW	

Note: Please refer to the technical note for other combinations of an aspect ratio conversion unit and laser focusing unit.

■Cooling water conditions

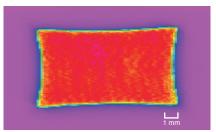
Parameter	Specifications	
Conductivity	1.0 μS/cm *	
Temperature	+15 °C to +30 °C	
Flow rate	1.0 L/mim.	
Adapt cooling water hose	Outer diameter approx. ϕ 6 mm	
	Inner diameter approx. φ4 mm	

^{*} Besides deionized water and pure water, tap water can be used.

Rating

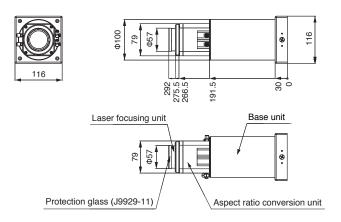
Parameter	Specifications	
Operating temperature	+5 °C to +40 °C	
Operating relative humidity	Less than 60% (no condensation)	
Storage temperature	-0 °C to +50 °C	
Location for use	Indoor use at a height less than 2000 meters above sea level	

Example of beam spot 2D image

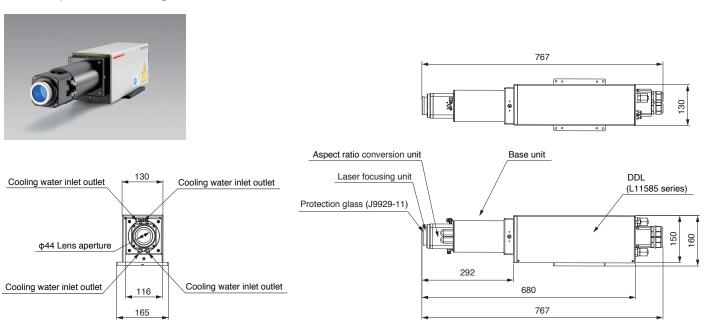


* 2 kW output when using a 1:2 aspect ratio conversion unit and an F200 Laser focusing unit

■Dimensional outline (unit: mm)



■Example of mounting to DDL (unit: mm)



HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

Laser Division, Business Promotion G.

314-5, Shimokanzo, Iwata City, Shizuoka Pref., 438-0193, Japan, Telephone: (81)539-62-5248, Fax: (81)539-62-2205

U.S.A.: HAMAMATSU COPPORATION: 360 Foothill Road, Bridgewater, NJ 08807, U.S.A.; Telephone: (1908-231-096, Fax: (1)908-231-1218

Germany: HAMAMATSU PHOTONICS DEUTSCHLAND GMBH: Arzbergerstr. 10, 82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-265-8 E-mail: info@hamamatsu.de

France: HAMAMATSU PHOTONICS FRANCE S.A.R.L.: 19 Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 10 D. Fax: (34)1707-294888, Fax: (44)1707-294888, Fax: (44)1707-294888, Fax: (44)1707-294777 F-mail: info@hamamatsu.co.uk

North Europe: HAMAMATSU PHOTONICS NORDEN AB: Torshamnsgatan 35,16440 Kista, Sweden, Telephone: (46)8-509-031-01 E-mail: info@hamamatsu.se

Italy: HAMAMATSU PHOTONICS (TALIA S.R.L.: Strada della Moia, 1 in: 6 20044 Arese (Milano), Italy, Telephone: (39)02-93 58 17 33, Fax: (39)02-93 58 17 41 E-mail: info@hamamatsu.com.cn

Talwan: HAMAMATSU PHOTONICS (CHINA) CO., LTD.: 1201, Tower B, Jiaming Center, 27 Dongsanhuan Beilu, Cheoyang District, 100020 Beijing, P.R. China, Telephone: (86)3-659-0080, Fax: (86)03-659-0081 E-mail: info@hamamatsu.com.cn

Talwan: HAMAMATSU PHOTONICS (CHINA) CO., LTD.: 13F-1, No.101, Section 2, Gongdao 5th Road, East Dist., Hsinchu City, 300046, Taiwan(R.O.C) Telephone: (88)3-659-0080, Fax: (86)3-659-0081 E-mail: info@hamamatsu.com.cn