



# DURMA

## BRIGHT BRILLIANT BRILASE ©

THE REASON OF CHOICE  
HIGH POWER  
FIBER LASER SYSTEMS



### Features

- Plug & Play Design
- Continuous Wave laser output up to 14 kW\*
- High Optical Efficiency
- Dross-free cut
- Industry 4.0 – ready with DurmaCloud interface
- 7/24 service support via remote connection\*\*

(\*) For other power levels, please contact with your local Durma Representative.

(\*\*) Requires internet connection.

### Intro

BRILASE ©, Turkey's first industrial fiber laser system, is developed, produced and presented to the global market by Durmazlar. With its superior beam quality and power options of up to 14 kW, BRILASE provides the highest quality in low-cost metal working to its users without compromising accuracy, speed and ease of use.

### Exclusive

Thanks to the low divergence angle offered by BRILASE ©, the laser beam can be optimized for any application. With the ability to go below 10% of the maximum laser power, processes such as precise marking, barcode, QR code and point coding can be done without changing the machine or laser equipment.



### Applications

- Conventional mild and stainless steel, aluminum, copper and brass processing
- Low Power Mode: Surface processing applications with laser output down to 30 W
- Application dependent BPP optimization
- Fully compatible with additive manufacturing systems: Powder Bed Fusion & Directed Energy Deposition



# TECHNICAL SPECIFICATIONS

SPECIFICATIONS	BRILASE 2 kW			BRILASE 4 kW			BRILASE 6 kW			BRILASE 8 kW			BRILASE 10 kW			BRILASE 12 kW			BRILASE 14 kW		
	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
Operation Modes	CW / Pulse Modulation																				
Polarisation Type	Random																				
Power Range (W)	170	2000	2100	170	4000	4200	170	6000	6300	170	8000	8400	170	10000	10400	170	12000	12400	170	14000	14400
Wavelength (nm)	1070 ± 5																				
Power Deviation (%)	± 2																				
Max. Pulse Repetition Rate (kHz)	5																				
Red Guide Laser Power	Max. 1 mW																				
<b>DELIVERY FIBER</b>																					
Interface	QD (QBH Optional)																				
(*) Core Size (µm)	100																				
BPP @100 µm fiber (mm*mrad)	3.3 (typ.)																				
Length (m)	20, 25, 30																				
Min. Bending Radius: Static (Dynamic) (mm)	100 (150)																				
<b>ELECTRICAL</b>																					
Voltage Requirements (3 Phase, VAC)	400 - 480																				
<b>COOLING</b>																					
Coolant Type	Deionized Water																				
Temperature Interval: Laser (°C)	20 ± 1.5																				
Temperature Interval: Optics (°C)	29 ± 2																				
Min. Flow Rate (l / dk)	16			36			50			58			72			80			94		
Working Pressure (bar)	2.1 - 3.1																				
<b>DIMENSIONS &amp; WEIGHT</b>																					
Dimensions (W x L x H mm)	850 x 1100 x 650			850 x 1100 x 950			1100 x 1100 x 950			150 x 1100 x 950			1250 x 1100 x 1650			1350 x 1100 x 1650			1450 x 1100 x 1650		
Weight(kg)	220			350			450			500			650			700			750		
Water Input - Output Connector	G1" - G1"																				
<b>ENVIRONMENTAL CONDITIONS</b>																					
Ambient Temperature (°C)	10 - 50																				
Humidity (non- condensing) (%)	10 - 80																				
<b>CONTROL INTERFACE</b>																					
Digital Signals & Interlock (V)	24																				
Analogue Control (V)	0 - 10																				
Industrial Ethernet	Var																				
Profinet	Var																				

\*Other core sizes are available upon request. Please contact your Durma Representative.



**BRIGHT LASERS  
BRILLIANT SOLUTIONS**

