

Quantel

Ylia M10 and M20

YTTERBIUM LASERS FOR INDUSTRIAL APPLICATIONS

The ideal fiber lasers
for marking and engraving
applications



KEY FEATURES

- 100 ns, 20 W, 1 mJ FIBER LASER
- PROVEN FIELD RELIABILITY
- HIGH ENERGY
- GOOD BEAM QUALITY
- ENHANCED PULSE SHAPE
- REPETITION RATE UP TO 250 kHz
- FAST + FEATURE : FAST SWITCH-OFF
- MAINTENANCE FREE
- EASY TO INTEGRATE

MAIN APPLICATIONS

- METALS MARKING
- METALS ENGRAVING
- MICROMACHINING
- SURFACE TREATMENTS
- RESISTORS TRIMMING

Ylia



Ylia M10 and M20 by Quantel

A rugged and compact pulsed fiber lasers intended for integration into industrial equipment. These lasers offer **10 W or 20 W** average power delivered via a flexible output fiber and collimating optics.

The Fast+ feature significantly reduces switch-off delay to 9 μ s resulting in a significant time per job reduction and higher marking quality compared to other fiber lasers.

Due to excellent pump-to-signal efficiency in the optical fiber, these powerful air-cooled laser systems are **maintenance free** with **low operational costs**.

Pulse repetition rate and output power can be controlled either by 8-bits TTL signal or USB, providing the user both fast communication and **user-friendly** interfaces at the same time.



Typical specifications

| MODEL | M10* | M20* |
|---|---|---|
| OPTICAL SPECIFICATIONS | | |
| Wavelength [nm] | 1064 | 1064 |
| Average power [W] | 10 | 20 |
| Pulse Energy [mJ] | 0.5 | 1.0 |
| Pulse duration [ns] | 100 | 100 |
| Peak power [kW] | 6.5 at 20 kHz | 9 at 20 kHz |
| Repetition rate [kHz] | 20 to 250 | 20 to 250 |
| Switch on / off [μ s] | 150 / 9 | 150 / 9 |
| BEAM CHARACTERISTICS | | |
| Beam quality (4 sigma) | 2.2 | 2.3 |
| Beam diameter (99%) [mm] | 8 | 8 |
| Beam divergence (beam expander) [mrad] | < 1 | < 1 |
| FACILITY REQUIREMENTS | | |
| Supply voltage [VDC] | 24 | 24 |
| Power consumption [W] | 100 | 125 |
| Cooling | Air cooled (heatsink and fans included) | Air cooled (heatsink and fans included) |
| Operating temperature [°C] | 5 - 40 | 5 - 40 |
| MECHANICAL DIMENSIONS | | |
| Optical head dimensions [mm ³] | 230 x 50 x 43 | 230 x 50 x 43 |
| Laser box dimensions [mm ³] | 286 x 215 x 95 | 286 x 215 x 95 |
| Fiber delivery length [m] | 5 | 3 |

* Beam expander 9mm

OPTIONS

BEAM EXPANDER 12 mm
RED AIMING BEAM
100 mm FOCUSING LENGTH



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