

## LASER DIODE SYSTEM

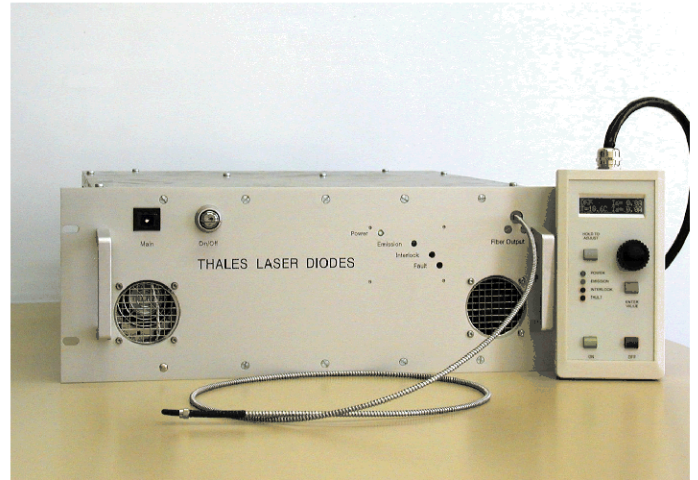
### DESCRIPTION

The TH-Cxxyy-FSz product is a compact turn-key fiber coupled laser diode system. Standard product delivers yy = 10 to 30W continuous optical power out of 200µm, 400µm or 600µm core diameter fiber.

This system is rack-mountable and includes temperature stabilization of the diode, power supply and control electronics. It can be monitored and controlled either from a remote keypad (remote control pendant) or via an integrated RS-232 computer interface.

All types of TLD fiber-coupled systems can be assembled in different configurations for fiber diameter, optical power and wavelength. Association of fiber coupled modules can also be integrated in the same package to increase the optical power.

This system is suitable for material processing, medical treatment, or solid-state laser pumping.



### MAIN FEATURES

- Integrated fiber source
- SMA 905 connector
- Air-cooled system
- 19" rack-mounting
- RS-232 interface
- CE marking
- Optional aiming beam
- Digital modulation

|        | 10 W         | 15W          | 20W          | 25W          | 30W          |
|--------|--------------|--------------|--------------|--------------|--------------|
| 795 nm | TH-C2610-FS2 | TH-C2715-FS4 | TH-C2720-FS4 | TH-C2825-FS4 | TH-C2830-FS4 |
|        |              | TH-C2715-FS6 | TH-C2720-FS6 | TH-C2825-FS6 | TH-C2830-FS6 |
| 808 nm | TH-C1610-FS2 | TH-C1715-FS4 | TH-C1720-FS4 | TH-C1825-FS4 | TH-C1830-FS4 |
|        |              | TH-C1715-FS6 | TH-C1720-FS6 | TH-C1825-FS6 | TH-C1830-FS6 |
| 840 nm | TH-C3610-FS2 | TH-C3715-FS4 | TH-C3720-FS4 | TH-C3825-FS4 | TH-C3830-FS4 |
|        |              | TH-C3715-FS6 | TH-C3720-FS6 | TH-C3825-FS6 | TH-C3830-FS6 |
| 915 nm | TH-C4610-FS2 | TH-C4515-FS4 | TH-C4520-FS4 | TH-C4525-FS4 | TH-C4530-FS4 |
|        |              | TH-C4515-FS6 | TH-C4520-FS6 | TH-C4525-FS6 | TH-C4530-FS6 |
| 940 nm | TH-C5610-FS2 | TH-C5515-FS4 | TH-C5520-FS4 | TH-C5525-FS4 | TH-C5530-FS4 |
|        |              | TH-C5515-FS6 | TH-C5520-FS6 | TH-C5525-FS6 | TH-C5530-FS6 |
| 980 nm | TH-C6610-FS2 | TH-C6515-FS4 | TH-C6520-FS4 | TH-C6525-FS4 | TH-C6530-FS4 |
|        |              | TH-C6515-FS6 | TH-C6520-FS6 | TH-C6525-FS6 | TH-C6530-FS6 |

**FS2: fiber core diameter = 200µm, FS4: fiber core diameter = 400µm, FS6: fiber core diameter = 600µm**

**SPECIFICATIONS****□ Optical Specifications**

|                               |                    |
|-------------------------------|--------------------|
| Optical output power          | yy = 10W to 30W CW |
| Optical power stability       | +/- 5%             |
| Fiber core diameter           | 200µm to 600 µm    |
| Beam divergence               | 0.22 N.A.          |
| Wavelength                    | 795nm to 980 nm    |
| Cable length                  | > 1m               |
| Fiber optic cable termination | SMA 905 connector  |

**□ Laser Diode Controls**

|                           |         |
|---------------------------|---------|
| Diode temperature control | +/- 1°C |
| Operating current         | 0 - 60A |
| Current accuracy          | 1 A     |
| Voltage compliance        | 3V      |

**□ Mechanical Specifications**

|        |                   |
|--------|-------------------|
| Size   | Rack 19", 4U high |
| Weight | < 16 Kg           |

**□ Electrical Specifications**

|                    |  |
|--------------------|--|
| Voltage            | ❖ 100 – 240Vac<br>❖ 50 – 60Hz                          |
| Power consumption  | < 800W   |
| Control interfaces | ❖ RS-232<br>❖ Remote keypad<br>❖ TTL modulation (2kHz) |

**□ Environmental Specifications**

|                       |  |
|-----------------------|--|
| Operating temperature | +15°C to +35°C                         |
| Storage temperature   | -10°C to +65°C                         |
| Operating humidity    | 5% to 85%, non condensing              |
| Cooling               | Internal fan (10cm clearance required) |

**Note :**

- **Upgraded versions allow integration of multiple diodes up to 120W CW out of fiber**
- **Optional aiming beam**
- **Rear fiber exit possible**

**For further information please contact:**

THALES LASER DIODES - Route Départementale 128 - BP 46 - 91401 ORSAY Cedex / France

Tel : (33) 1 69 33 06 61

Fax : (33) 1 69 33 06 62

E-mail : [infotld@fr.thalesgroup.com](mailto:infotld@fr.thalesgroup.com)

<http://www.thales-laser-diodes.com>

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