



Micro welding laser

IPG YLS-600/6000-QCW-AC Fibre Laser System

Quasi-continuous-wave fibre laser ideal for spot welding, cutting, seam welding and drilling applications.

Features and benefits

- Versatile fibre laser, working in continuous-wave and pulsed modes
- High linear processing speeds (up to 1m/sec), for minimised component distortion and high suitability for volume production applications
- Small laser beam width (~50µm), for narrow heat-affected zone
- High beam quality (BPP=2mm·mrad with 50µm fibre diameter)
- Pulse shaping capability, to enable tailored energy distributions
- Outstanding pulse power and energy stability

Some applications

- Spot and seam welding
- Drilling and cutting
- Joining of aluminium to copper for electrical applications in automotive, transport and aerospace industries
- Fuel cell manufacture for applications including transport and bulk energy storage
- Medical devices
- Packaging
- Electronics and sensors

Technical specification

- 1070µm wavelength
- Pulsed/Continuous-wave (CW) operation
- 6000W peak power
- 600W maximal average output power
- 60J maximal average pulse energy
- Max modulation rate: 10Hz (at pulsed mode t=10msec); 500Hz (at pulsed mode t=0.2msec); 500Hz (CW mode)
- 50µm and 200µm beam width
- >30% wall-plug efficiency

