

TD412

YAG Laser
for marking applications



TD412

High quality
High efficiency



A MARK WHICH DEFIES TIME

Sharp, precise marking

TD412 : YAG Laser solution

MARKING

The diode-pumped laser TD412 is the best solution for high definition marks on plastics and metals

TD 412 Very High Marking Quality

- Excellent beam quality, due to diode end-pumping, creates thin marking lines
- Gaussian spot for optimum marking precision
- High resolution galvanometric scan head
- High quality spot for a perfect mark without any burrs



Example of integration

TD 412 Versatile and flexible

- Wide range of settings to adapt the result to the need on a wide range of materials
- Unparalleled marking speed up to 2,5m/sec for high productivity
- Easy integration on line or as independent marking solution
- High peak power for high contrast marking



TD 412 Reliable and industrial

- Minimized optical elements: improves reliability, marking consistency and reduced maintenance
- Possibility of Matrix marking to get short cycle time
- Free mounting position of the laser and the CCU to realize a free working station

NEXT-GENERATION SOLUTION

Traceability oriented

Product Highlights

TD 412 "Turn-key" solution

- Complete pack: Head, UC, cords, software, glasses, user's manual, etc...
- Range of accessories
- Flexible connectivity
- Benefits from 25 years of Technifor know-how



- Value-added mark
- Easy-to-use
- High quality results
- Versatile machine
- Flexibility
- Worldwide support

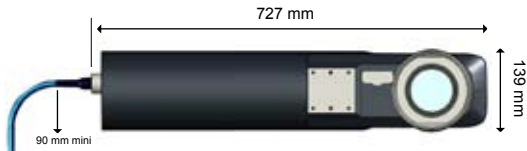
TD 412 Reduced operation costs

- Low electrical consumption
- Air-cooled: no external cooling unit
- Silent: <57 dB, no additional sound-proofing required
- Can operate without a PC : flash memory for file storage
- UC driving : independent, PC or PLC linked
- Easy-to-use and maintain: reduced training costs

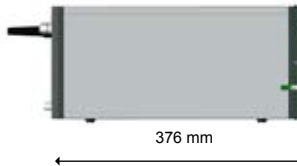
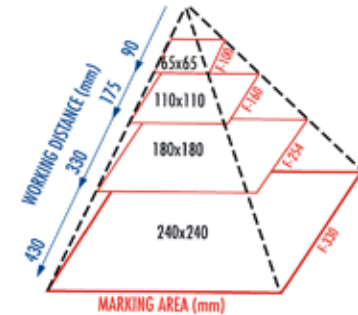
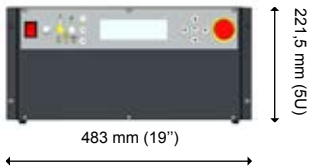
TD 412 Universal programming

- Command instructions for programming with a PC or PLC
- Input/Output controls for interface with PLC
- Reception and external data marking (bar code reader, PC, PLC)
- File merge

Technical characteristics



Class 4 Laser
EN 60825-1 standard
CDRH US 21 CFR, sub chapter J compliant.
ROHS 2002/95/CE



2D/3D drawings available upon request

Laser Specifications

- Type..... Diode-pumped Nd:YVO4 Laser
- Wavelength..... 1064 nm
- Average power.....12W
- Peak power.....>25kW
- Pulse duration.....10 ns
- Energy.....0.3 mJ
- Frequency range.....from 5 to 200 kHz
- M2.....< 1.1
- Spot size.....< 40 µm
- Resolution.....< 3 µm
- Fiber length.....3, 5, 10m

Weight

- TD412 module.....13 Kg
- UC412 Control unit.....21 Kg

Environment and power supply

- Power supply..... 100 – 240 VAC, 50-60Hz
- Consumption.....400W nominal
- Operating temperature.....15 – 35°C
- Humidity.....<80%

TD 412 T700W marking program



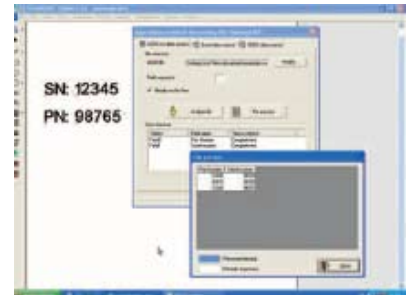
Five clicks and you're marking!

Bundled with the laser, an efficient, user-friendly program with intuitive graphic interface:



Various file example

- Traceability functions: serial numbers, variables, date codes, UID syntax...
- Industrial files management:DXF, BMP
- Bar codes (39, 128, UPC...), DataMatrix™, QR codes...
- Link to databases (ODBC, Excel, ASCII...).
- Generate historical files.
- Material library with presets.
- Compatible with: ®Windows 2000, XP, ®Windows Vista



File merge example

Options and accessories

Work Station Class1



Motorized or manual Z-axis



Focus pointer



Rotary marking device



Compact Class 1 Work Station (with door or drawer)



Compact Class 4 Work Station



CHR height adjustment system



Data Matrix™ code reader



Fume extractor



Focal lens : (100, 160, 254, 330 mm)



Applications

TD412 Laser : Easy-to-use solution to answer highly demanding marking requests

TD 412

SURFACE MARKING

Medical, Aerospace,
Plumbing, Cutlery...



TD 412

HIGH SPEED MARKING

Plastic processing,
Electric, Electronic...



TD 412

DEEP MARKING

Automotive, Mechanical...



TD 412

VERSATILE MARKING (MATERIAL, CONTRAST..)

Promotional items,
Business gifts...



Please visit our website to see our full range of :
Laser, Micro-percussion and Scribing Solutions.



GravoTech Marking SAS
114, quai du Rhône - F-01708 MIRIBEL Cedex
Tel. +33 (0)4 78 55 85 52 - Fax +33 (0)4 78 55 85 54
E-mail : tf.dvfrance@technifor.com
www.technifor.com



Technifor is a registered trade mark of GravoTech Marking SAS