



MARK OF CONFIDENCE

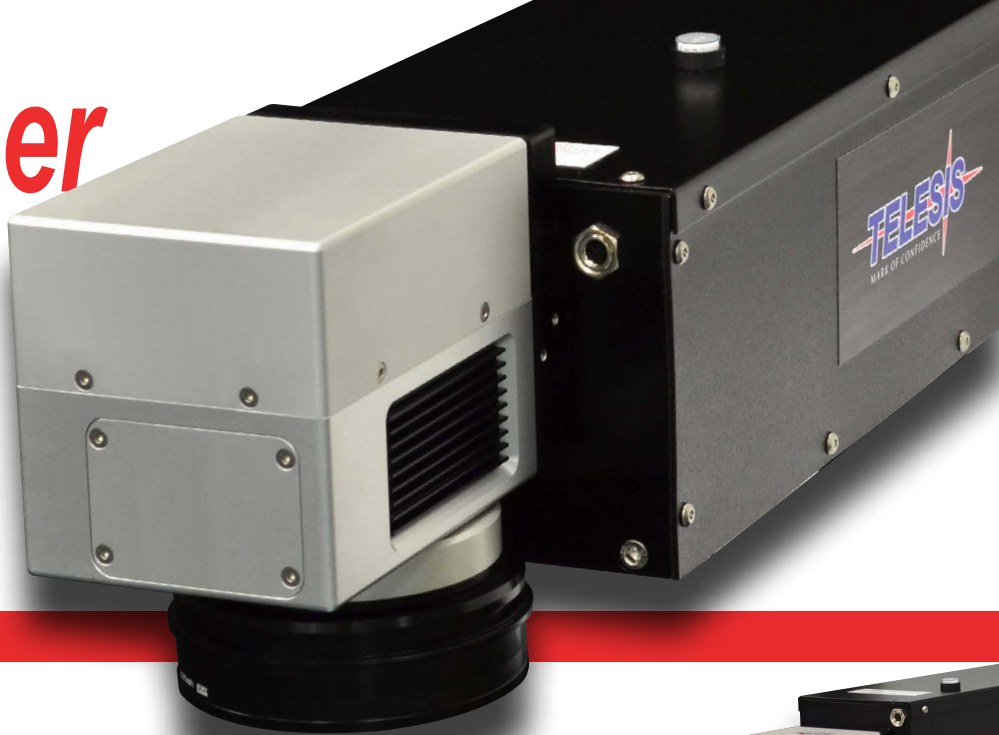


F-SERIES
Fiber Lasers



First in Fiber

Telesis pioneered the use of fiber laser technology in product identification with the Zenith 10F in 2003.



2

Telesis continues to lead in the evolution of marking technology with innovations that include Vari-Z, Auto-Focus and Integrated InLine Vision to provide manufacturers with a wide selection of highly versatile laser markers that integrate seamlessly into the production workflow.

With a team of global technical and support specialists, it is no surprise Telesis fiber lasers are positioned in thousands of leading manufacturing plants around the world.

This is Telesis, this is what we do!

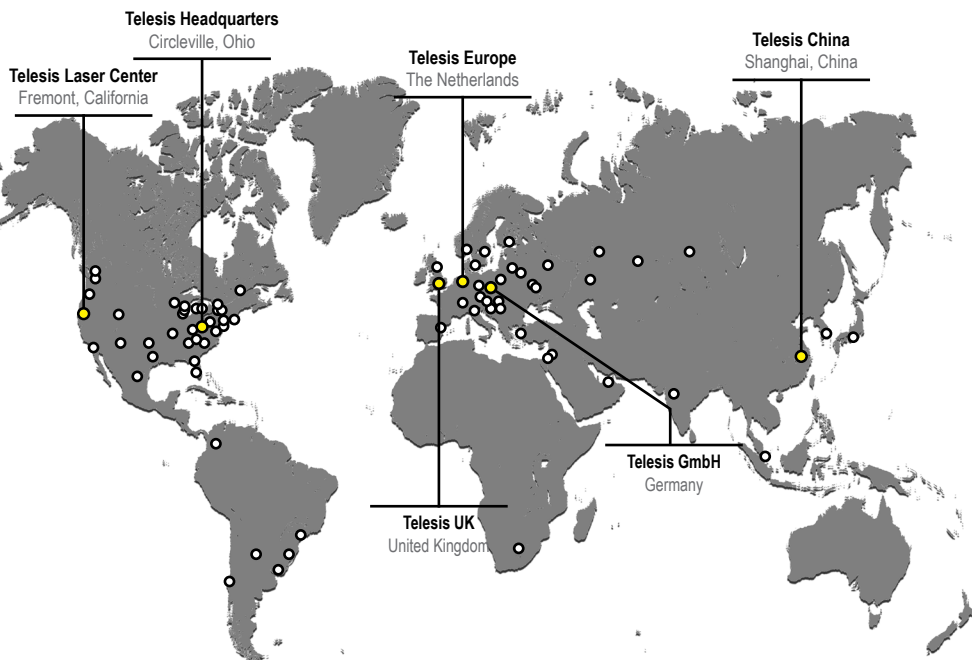
30
WATT

50
WATT

75
WATT



Telesis global satellite and partner locations



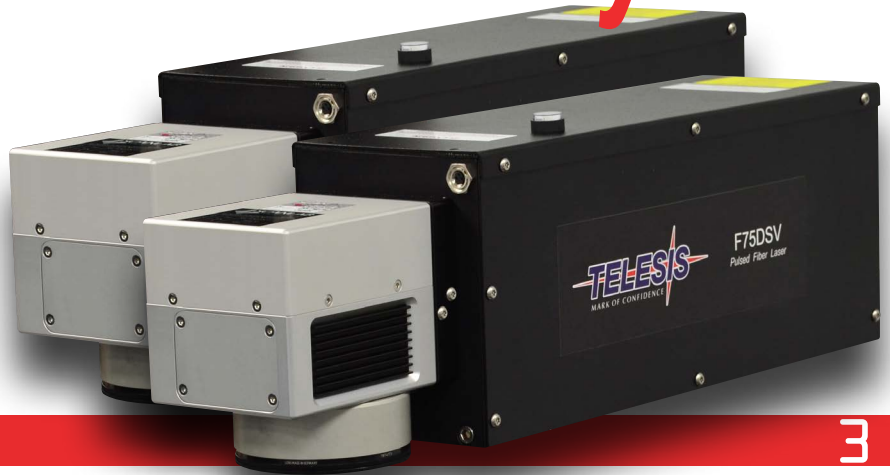
CONTENTS

F2H Dual Head Laser	3
Vari-Z	4
Auto-Focus	4
Integrated Inline Vision	4
3D Marking	5
Deep Engraving	6
Visual Design Software	7
Workstations/Enclosures	8-9
Specifications	10
Accessories	11
Dimensions	12-13
UV & CO ₂ Lasers	14
E-Series Lasers	15
Dot Peen & Scribe Markers	16

Productivity x 2



*F16I Controller:
2 heads with 1
controller for
greater
productivity*

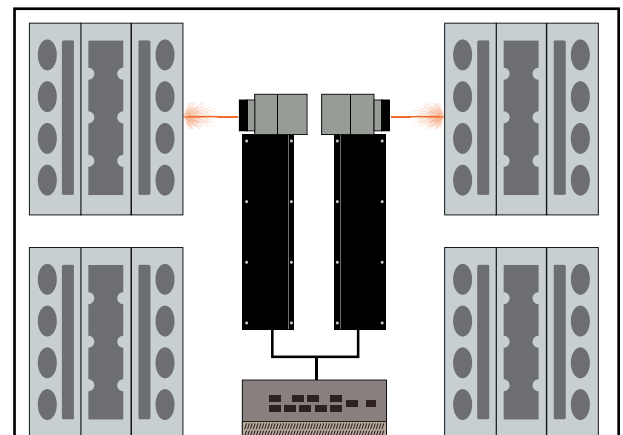


F2H Dual Head Fiber Laser Marking System



The F2H combines two rugged, industry-best F-Series laser markers with the MERLIN® 2H software for unmatched marking efficiency.

- Patented dual head technology reduces integration time
- Operates two lasers independently with one laser controller system to reduce cost of ownership
- Reduces part handling for increased throughput



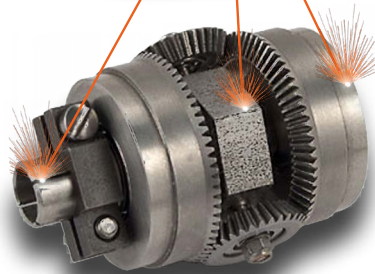
Control two independent marking lasers with the F16I Controller.

Unmatched Versatility

4



Integrated Ring Light available for code illumination



Vari-Z

Variable Z-axis focus adjustment

- With an industry-best focal range of up to $\pm 4.72"$ (119.89mm), the Vari-Z significantly reduces part and laser positioning time
- Eliminates costs for external Z-axis hardware
- Variable focus eliminates the need for precise laser mounting
- Makes part change-over fast and easy

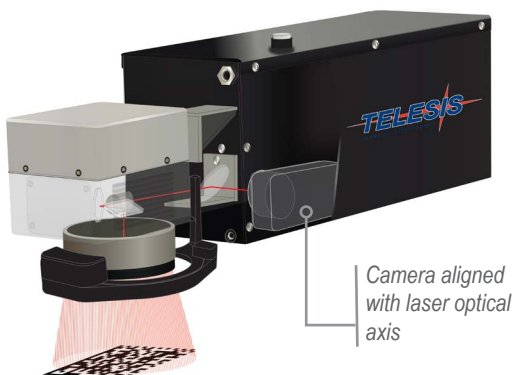


Advanced Through-The-Lens code reading

Auto-Focus

Used with Vari-Z to achieve perfect focus for every cycle

- High quality marks every time
- Eliminates expensive tooling costs
- Features real-time correction for process variability



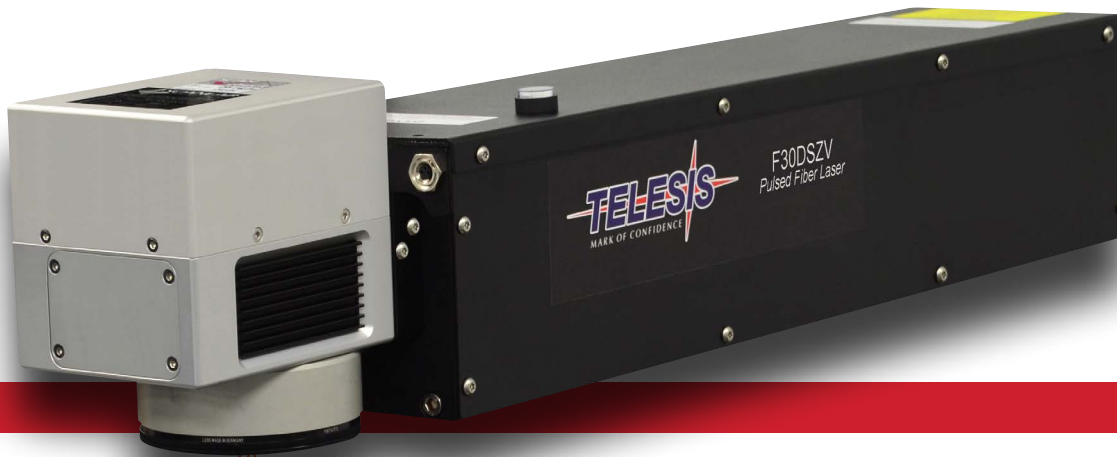
Camera aligned with laser optical axis

Integrated InLine Vision

Advanced code reading and custom inspection solution

- Reduces footprint and integration costs compared to external vision system
- **TeleView Option:** Reads and grades data matrix codes and features a live viewing window with laser focus indicator
- **Cognex Option:** Reads and grades to ISO and AIM DPM standards

Complexity Simplified



5

3-Dimensional Marking



Part marking applications are not always on flat, single-plane surfaces. The Telesis F-Series fiber lasers also mark on cylindrical, multi-plane and angled surfaces without character distortion or depth variation.



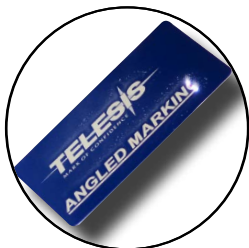
Cylindrical

Telesis F-Series lasers remain ahead of the technology curve, wrapping text and logos to cylindrical targets.



Multi-Plane

With the largest focal range available, Telesis F-Series fiber lasers rapidly adjust the focus to differences in target positions.



Angled

In conjunction with the powerful MERLIN® software, the F-Series lasers instantaneously adapt to the depth-to-aspect ratio calculation presented by angled surfaces.

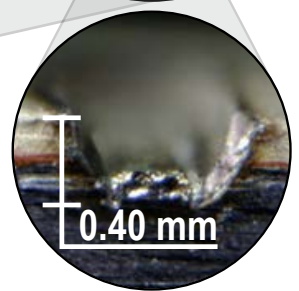
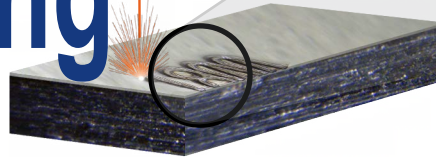
Faster & Cleaner

Enhanced galvo system provides cleaner marks in less time



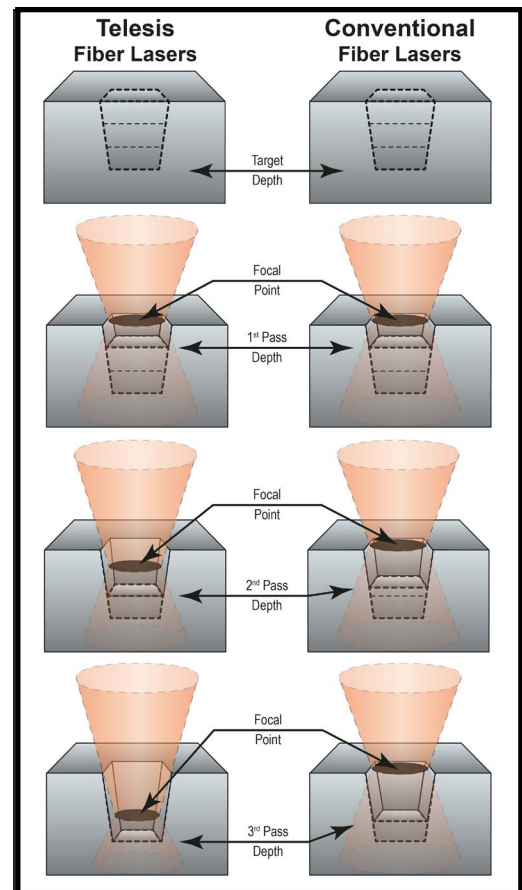
6

Deep Engraving



With superior beam quality, the F-Series offers deep engraving capabilities that outperform higher powered systems.

- Focal point adapts to increasing depths with each pass to apply maximum energy to the target surface
- Telesis' extensive marking experience combined with the highest quality components delivers the depth required in the shortest possible time
- Superior beam quality for faster part processing and marking



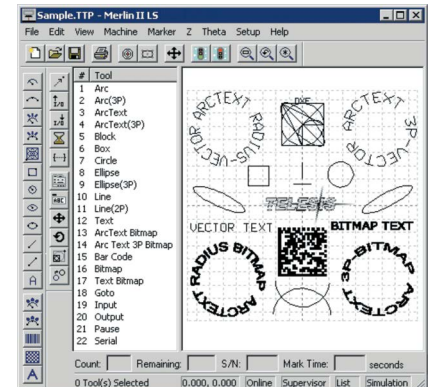
Easy Programming

Optional Automated Machine Interface (AMI) software is a user friendly, customizable run screen for operators



MERLIN® Visual Design Laser Software

- Complex string management made simple with variable data combinations
- Designed by Telesis and operates on most 32- and 64-bit Windows® operating systems
- Easily interacts with customer supplied databases
- Visually accurate on-screen representation
- Easily integrates with outside equipment and can control the entire marking operation
- Supports multi-step process flow within single marking pattern
- Seamless integration of vision control
TeleView software standard (contained within MERLIN®)
- Importable file formats include:
 - AutoCAD DXF
 - Adobe Illustrator
 - Windows® Bitmap images
 - TrueType fonts
 - Corel Vector Graphics
- Supports 4-Axis Movement and Mark-On-The-Fly applications



User-friendly interface to easily create arc-text and shapes and import graphics

DATE	TIME	PART
20170621	132742	40191

●	2017062113274240191	✓
●	2017062113274240191	
○	2017062113274240191	
○	2017062113274240191	

Supports variable data marking, including, serialization and Julian Calendar applications

Safety Centric

Telesis ProStations provide a modular way to safely mark components within an enclosure engineered to CDRH Class 1 and ISO13849-1 guidelines.



ProStation

- Laser-safe viewing window
- Easy push button control
- Rugged industrial all-steel construction
 - T-slotted base for easy fixture replacement (not shown)
 - Convenient inside lighting (not shown)
- Automatic pneumatic door with safety bump strip
 - Optional light curtain
 - Optional dual palm button
- ISO13849-1 safety circuitry (enclosed within base)
- Heavy duty locking wheel casters



Pneumatic door operation



Adjustable ergonomic computer monitor, mouse and keyboard arm



Manual and Programmable-Z axis adjustment

Safety Customized

ENCLOSURE	WEIGHT
ProStation Enclosure with base	1400 lbs.
MiniStation Enclosure with base	1000 lbs.
TablePro Enclosure (black)	400 lbs.
DrawerPro Enclosure with base	800 lbs.



MiniStation
Shown with
Optional
Rolling
Steel Base



MiniStation

The Telesis MiniStation is ideally suited for safe laser marking in tight, high-traffic applications. The durable, all-steel enclosure requires minimal space.

TablePro

Providing Class I safety standards in a compact, modular design, the Telesis TablePro is ideal for manually loaded benchtop solutions.

DrawerPro

The Telesis DrawerPro features an extruded aluminum frame with polycarbonate panels and interlocking sliding drawer assembly for easy loading and unloading of components.

Customized Enclosures

For unique marking applications, Telesis engineers can custom build a laser marking enclosure to easily integrate into the production line.

Laser Specifications



Controller Models

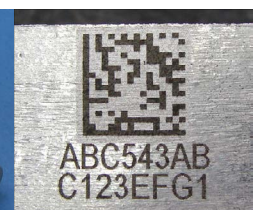
PART #	DESCRIPTION
F16I	Dual head separate PC
F16IE	Dual head embedded PC
Model 6	Single head separate PC
F14A	Single head embedded PC

10

LASER MARKER SPECIFICATIONS

MODEL		F30 - F30DS	F50 - F50DS	F75 - F75DS
MARK DESCRIPTION		Q-switched Ytterbium Fiber	Q-switched Ytterbium Fiber	Q-switched Ytterbium Fiber
	WAVELENGTH	1060 nm	1060 nm	1060 nm
	AVERAGE POWER	up to 30 watts	up to 50 watts	up to 75 watts
PULSE FREQUENCY		30-200kHz	30-100kHz	30-100kHz
POSITIONING		Visible Red Diode Light	Visible Red Diode Light	Visible Red Diode Light
MARK AREA		Lens Dependent (see chart on page 11)		
STANDOFF DISTANCE				
RESOLUTION		16-Bit (marking resolution is lens dependent)		
CHARACTER	FONT	Vector, Custom, Windows® Fonts, TrueType		
	BARCODE	✓	✓	✓
	2D CODE	✓	✓	✓
	GS1 DATABAR	✓	✓	✓
	LOGO IMAGE	✓	✓	✓
	MACHINE OPERATION	Manual or Automatic	Manual or Automatic	Manual or Automatic
INTERFACE COMMUNICATIONS		TCP/IP, Ethernet IP, Profinet, Discrete I/O		
HEAD CABLE		3m or 5m	3m or 5m	3m
COOLING		Air Cooled	Air Cooled	Air Cooled
VOLTAGE & POWER USAGE		45W	68W	73W
ENVIRONMENTAL	OPERATING TEMPERATURE	59° - 95° F	59° - 95° F	59° - 95° F
	RECOMMENDED TEMPERATURE	69° - 77° F	69° - 77° F	69° - 77° F
	AMBIENT RELATIVE HUMIDITY	10% - 85% Non-Condensing	10% - 85% Non-Condensing	10% - 85% Non-Condensing
WEIGHT	CONTROLLER	33 lbs.	33 lbs.	33 lbs.
	LASER HEAD	15 lbs.	15 lbs.	15 lbs.
WARRANTY		24 month diode; 12 month electronics*		

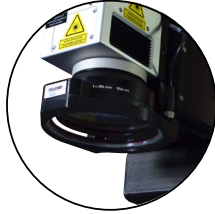
* Subject to change



Accessorize

Ring Light Kits

PART #	DESCRIPTION
86110-2	Vari-Z Ring Light kit
86110-1	Non-Vari-Z Ring Light kit



Rotary Devices

PART #	DESCRIPTION
58989	RD3: 3" Manual rotary chuck
58990	RD5: 5" Manual rotary chuck
80395	Velmet Precision Rotary



Ethernet/Profinet

PART #	DESCRIPTION
81592	Profinet card for external PC
81590	Ethernet IP card for external PC
81593	Profinet card for embedded PC
81591	Ethernet IP card for embedded PC
76888	External Profinet adapter
77917	External Ethernet IP adapter



Lenses

PART #	LENS	MARKING AREA		STANDOFF DISTANCE	
		(mm)	(in)	(mm)	(in)
79596-1	100mm	65x65	2.56x2.56	98 (±6°)	3.86 (±0.23°)
79596-2	160mm	90x90	3.54x3.54	176 (±15°)	6.93 (±0.63°)
79596-3	163mm	110x110	4.33x4.33	185 (±16°)	7.28 (±0.63°)
79596-4	254mm	175x175	6.89x6.89	296 (±39°)	11.65 (±1.54°)
79596-5	330mm	230x230	9.06x9.06	387 (±39°)	15.23 (±1.54°)
79596-6	350mm*	250x250	9.84x9.84	391	15.39
79596-7	420mm	290x290	11.42x11.42	493 (±120°)	19.45 (±4.72°)



* Not available for Vari-Z markers ° Vari-Z work clearance variance

AutoFocus Kits

PART #	DESCRIPTION
83544	160mm for Vari-Z lasers
83593	254mm for Vari-Z lasers



Linear Stages

PART #	DESCRIPTION
75104	350mm X-axis
84697	300 x 200 X/Y axis



Mounting Posts

PART #	DESCRIPTION
42389	Manually adjusted Z-axis Mounting Post
42393	Programmable Z-Axis Mounting Post



Fume Removal Systems

PART #	DESCRIPTION
77793	Fumex FA1 Mini
76775	Purex 300i



Communication Module

PART #	DESCRIPTION
74446	MERLIN® Opto isolated for 24 VDC



Start Print Foot Pedal

PART #	DESCRIPTION
24373	Foot Pedal

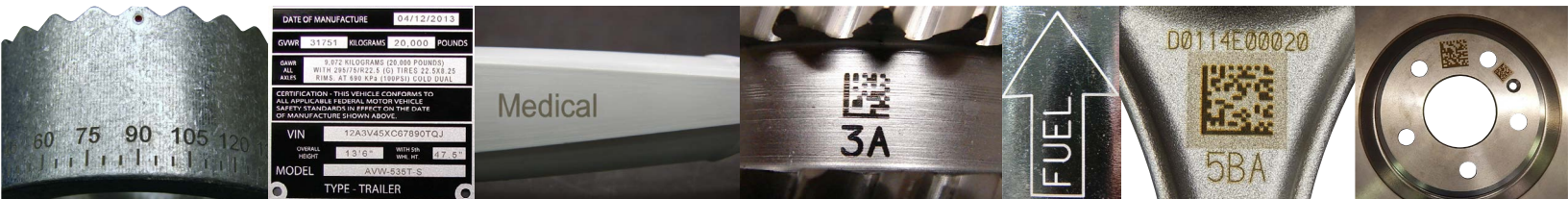


Start/Abort Control Unit

PART #	DESCRIPTION
24374	Control Unit

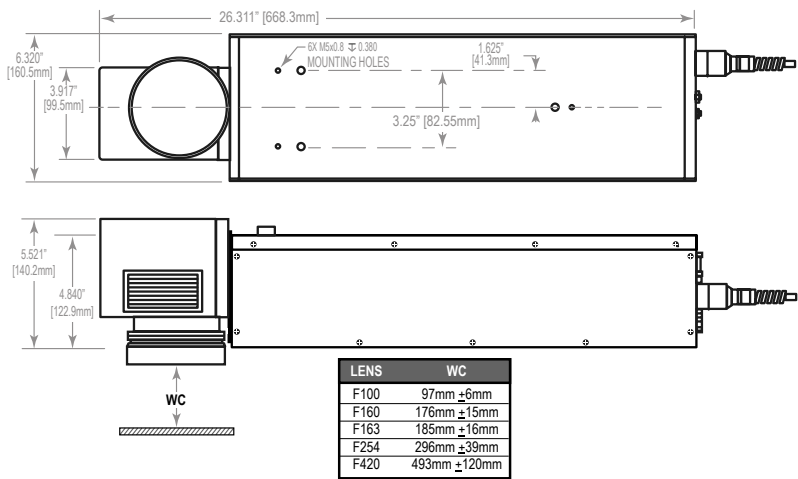


Laser Dimensions

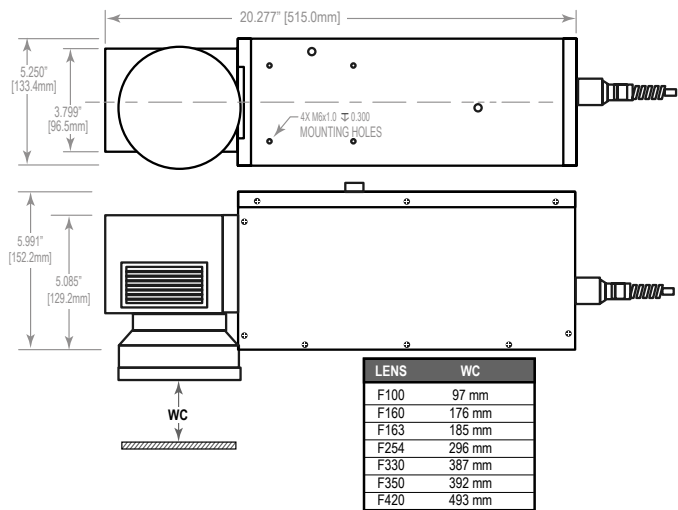


12

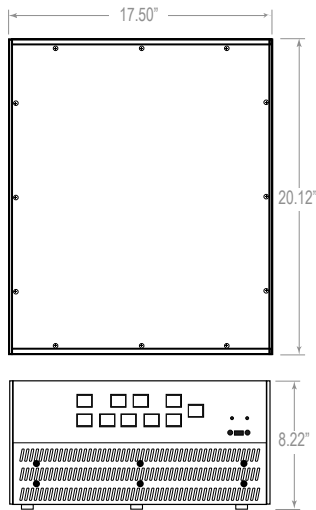
Vari-Z F-Series



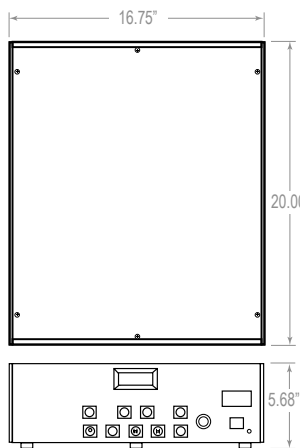
Standard F-Series



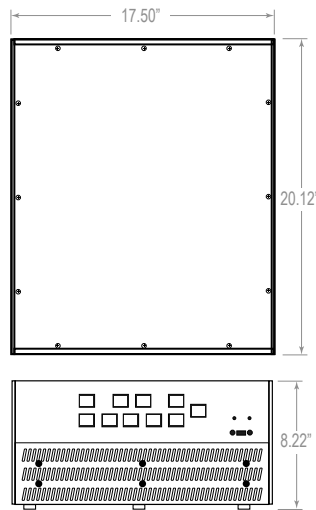
F16I Controller



Model 6 Controller



F14A Controller

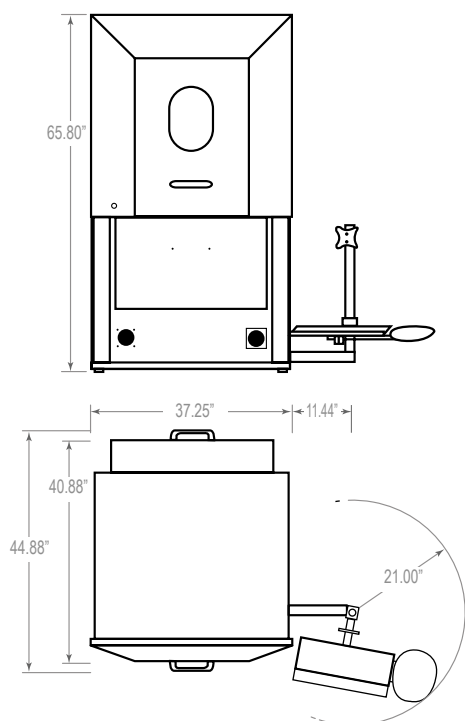


Enclosure Dimensions

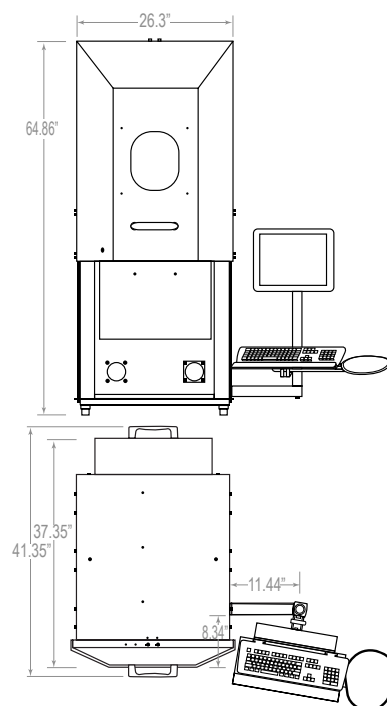
PART #	L x W x H	HEIGHT (Door Open)
ProStation Enclosure	38.5" x 40.64" x 79"	104.07"
MiniStation Enclosure	23.6" x 41.35" x 78"	103.00"
TablePro Enclosure	20" x 28" x 20"	n/a
DrawerPro Enclosure	24" x 24" x 50"	n/a

13

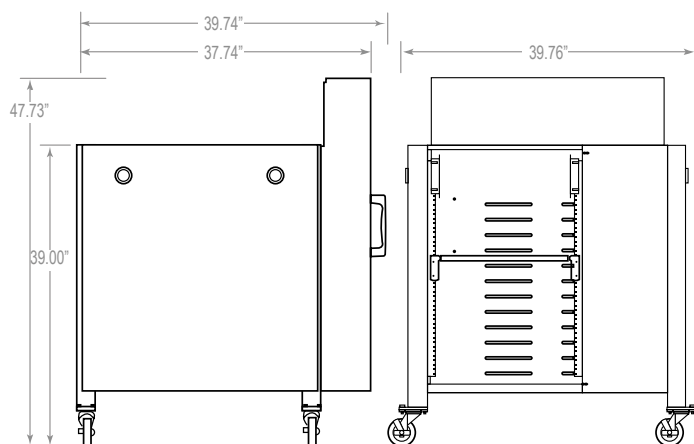
ProStation Enclosure



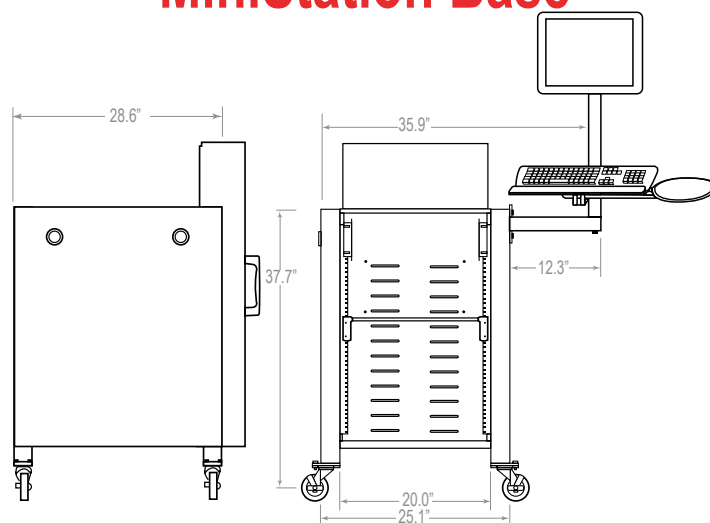
MiniStation Enclosure



ProStation Base



MiniStation Base



Uncommon Dependability



14

U-Series Lasers

The Telesis U-Series UV Laser Marking Systems are ideal for “cold” marking delicate materials, including electronics, plastics, glass and precious metals.

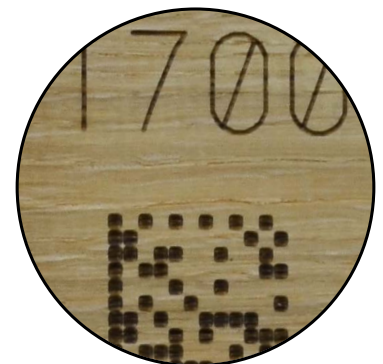


Great for marking glass and other delicate materials



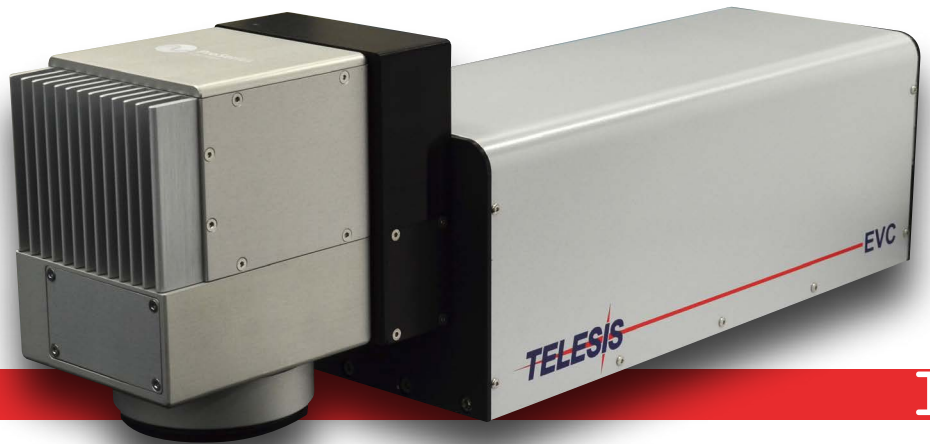
C-Series Lasers

The C-Series CO₂ lasers are ideally suited for high-speed, mark-on-the-fly manufacturing applications. This versatile laser is suitable for high resolution marking on plastics, labels and many organic materials.



Marks a variety of materials including plastics & organics

Performance Excellence



15

E-Series Lasers

A superior marking laser.

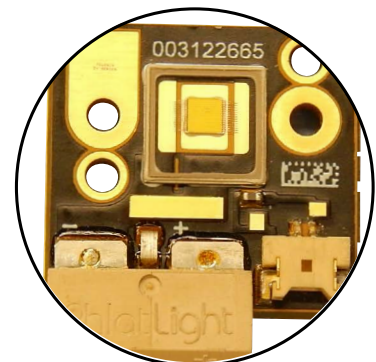
Telesis' E-Series vanadate lasers produce exceptional beam quality allowing for good contrast on most materials.

The E-Series lasers are particularly well suited for high resolution marking applications.

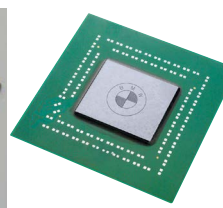
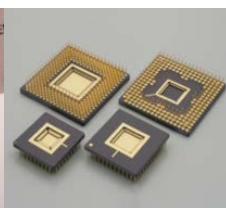
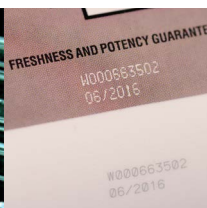
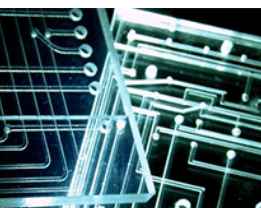
- Short pulse widths enhance mark quality
- Available in both 1064nm Infrared and 532nm Green
- Longest standard focal range available



Cold marking capability for heat sensitive materials



Shorter pulse widths for clean marks





CORPORATE HEADQUARTERS

28181 River Drive
Circleville, Ohio 43113
United States of America

INDUSTRIAL LASER CENTER

Fremont, California 94538

TEL: 740.477.5000
SALES: 800.654.5696
SERVICE: 800.867.8670
WEB: www.telesis.com
EMAIL: sales@telesistech.com

UNITED KINGDOM

+44 (0) 1404-549139
www.telesistech.co.uk
uksales@telesistech.com

EUROPE (The Netherlands)

+31 (0) 88 505 1800
www.telesistech.nl
sales-europe@telesistech.com

GERMANY

+49 (0) 2191 60908-80
www.telesistech.de
info@telesis-gmbh.de

CHINA

+86-21-3390-1806
www.telesischina.com
sales@telesischina.com

PINSTAMP® Dot Peen Marking Systems

Telesis first made its mark in the part identification industry with the rugged PINSTAMP® line of industrial dot peen markers with the patented Floating Pin design. PINSTAMP® remains the industry standard with many still in operation after their original placement in the 1990's.



TeleScribe® Scribe Marking Systems

TeleScribe® marking systems produce high quality, continuous characters in virtual silence. The high torque stepper motors deliver up to two characters per second in metal and plastics. Available in benchtop and in-line versions.

