

FS621M-U-6

Industrial Scale Metal Platform with 1.7 Meter in Z Height

► www.farsoon-gl.com



EXTRA-LARGE BUILD VOLUME WITH 1.7 METER Z-AXIS

With a build platform size of 620×620mm and vertical axis of 1.7 meter, the FS621M-U-6 features one of the largest build volumes on metal laser sintering market. The outstanding Z height opens many new manufacturing possibilities in large-scale industrial applications that favors the vertical axis; such as aerospace & aviation, oil & gas, and more.

HIGH PRODUCTION SPEED + QUALITY

Equipped with powerful hexa 500W fiber lasers, the FS621M-U-6 allows for maximum production rates per laser. The advanced multi-laser scanning strategy enables high calibration accuracy in the overlapped area; ensuring the uniform mechanical properties of the built parts throughout the build platform. The powerful build process controls, real-time recording & monitoring ensure the best build quality.

OPERATION EASE

The FS621M-U-6's integrated filter module features secondary circulating system and a dual-station filter design that allows for the exchanging of filters without disturbing the build process. The powder handling processes share a common powder container design which are used during loading, unloading and sieving procedures. These containers offer fully-sealed powder handling, easy transportations between the stations, and safe storage of powder. This partially closed powder system allows for the capability of continuous feeding of powder to the build while retaining the ability to easily exchange and monitor powder quality.

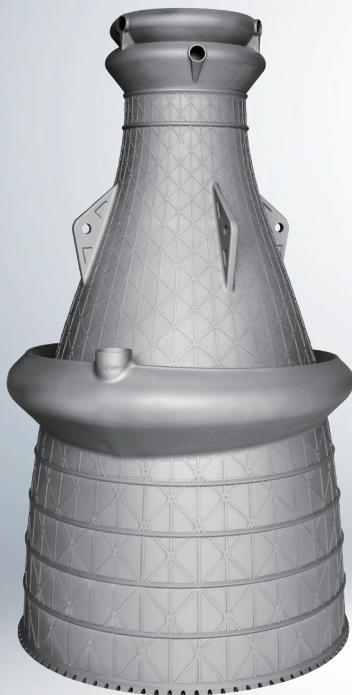
FARSOON FS621M-U-6

TECHNICAL DATA	FS621M-U-6
External Dimensions (L×W×H)	6200×5225×5510 mm (244.1×205.7×216.9 in)
Build Cylinder Size (L×W×H)	620×620×1700mm (24.4×24.4×66.9 in) (Height incl. build plate)
Effective Build Size¹ (L×W×H)	612×612×1700mm (24.1×24.1×66.9 in) (Height incl. build plate)
Net Weight	Approx. 15000 KG (33069.3 lb)
Layer Thickness	0.02~0.1 mm (0.0008-0.0039 in)
Scanning Speed	Max. 10 m/s (32.8 ft/s)
Laser Type	Fiber Laser, 6×500W
Scanner	F theta lenses
Inert Gas Protection	Argon/Nitrogen
Average Inert Gas Consumption in Process	8 - 10 L / min
Operating System	64 bit Windows 10
Comprehensive Software	BuildStar, MakeStar®
Key Software Features	Open machine key parameters, real-time build parameter modification, three-dimensional visualization, diagnostic function, support-add function
Data File Format	STL
Power Supply	EUR/China: 400V±10%, 3~/N/PE, 50Hz, 60A US: transformer sold with machine
Operating Ambient Temperature	22-28°C (71.6-82.4°F)
Materials²	HX, IN718, HAYNES 230, 316L, 304L, Ti6Al4V, TA15, AISi10Mg,GH4099*, CuCrZr*, IN625*, more materials to come

¹ The functional build volume depends on the parts / materials.

² The materials marked with * are in the build process development.

Many factors may affect the performance characteristics of products. We recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. Farsoon makes no warranties of any type, express or implied, including but not limited to, the warranties of merchantability or fitness for a particular use. This also applies regarding the consideration of possible intellectual property rights as well as laws and regulations. Farsoon reserves the right to change the technical data without notice. Farsoon®, Buildstar®, Makestar® are registered trademarks of Farsoon Technologies. Last Change: 2026-04



THRUST CHAMBER & NOZZLE EXTENSION OF ROCKET ENGINE

MATERIAL: 316L

SYSTEM: FS621M-U-6

SIZE: 532×550×944 MM (20.9×21.7×37.2 IN)

www.farsoon-gl.com

AMEA Farsoon Technologies Co., Ltd. | +86.731.8397.6198 | globalinfo@farsoon.com | No. 2710 Yuelu West Boulevard, Yuelu District, Changsha, Hunan, China

AMERICAS Farsoon Americas CORP. | +1 512-551-9901 | contact@farsoonam.com | 3161 Eagles Nest Street, Suite 350, Round Rock, TX 78665

EUROPE Farsoon Europe GmbH | +49 70316325822 | wehelpyou@farsoon-eu.com | Industriestraße 5/1, 71069 Sindelfingen, Germany

FS621M Pro

6 Lasers | Built for High Volume Metal Production

▶ www.farsoon-gl.com



EXTRA-LARGE BUILD VOLUME

With a build platform size of 620×808mm and vertical axis of 1.2 meter, the FS621M Pro features one of the largest build volumes on metal laser sintering market. The extended Y axis and Z height opens many new manufacturing possibilities in large-scale industrial applications that favors the vertical axis; such as aerospace & aviation, oil & gas, and more.

PRODUCTIVITY + QUALITY

Equipped with powerful hexa 500W fiber lasers, the FS621M Pro allows for maximum production rates per laser. The advanced multi-laser scanning strategy enables high calibration accuracy in the overlapped area; ensuring the uniform mechanical properties of the built parts throughout the build platform. The powerful build process controls, real-time recording & monitoring ensure the best build quality.

OPERATION EASE

The FS621M Pro' integrated filter module features secondary circulating system and a dual-station filter design that allows for the exchanging of filters without disturbing the build process. The powder handling processes share a common powder container design which are used during loading, unloading and sieving procedures. These containers offer fully-sealed powder handling, easy transportations between the stations, and safe storage of powder. This partially closed powder system allows for the capability of continuous feeding of powder to the build while retaining the ability to easily exchange and monitor powder quality.

FARSOON FS621M Pro

TECHNICAL DATA	FS621M Pro-6
External Dimensions (L×W×H)	6300×4050×4330 mm (248.0×159.9×170.5 in)
Build Cylinder Size (L×W×H)	620×808×1200mm (24.4×31.8×47.2 in) (Height incl. build plate)
Effective Build Size¹ (L×W×H)	612×800×1200mm (24.1×31.5×47.2 in) (Height incl. build plate)
Net Weight	Approx. 13000 KG (28660.1 lb)
Layer Thickness²	0.02~0.1 mm (0.0008-0.0039 in)
Scanning Speed	Max. 10 m/s (32.8 ft/s)
Laser Type	Fiber Laser, 6×500W Fiber Laser, 6x1000W (Beam Shaping)
Scanner	F theta lenses
Inert Gas Protection	Argon/Nitrogen
Average Inert Gas Consumption in Process	8 - 10 L / min
Operating System	64 bit Windows 10
Comprehensive Software	BuildStar, MakeStar®
Key Software Features	Open machine key parameters, real-time build parameter modification, three-dimensional visualization, diagnostic function, support-add function
Data File Format	STL
Power Supply	EUR/China: 400V±10%, 3~/N/PE, 50Hz, 60A/80A US: transformer sold with machine
Operating Ambient Temperature	22-28°C (71.6-82.4°F)
Materials³	HX, IN718, HAYNES 230, 316L, 304L, Ti6Al4V, TA15, AISi10Mg, GH4099*, CuCrZr*, IN625*, more materials to come

1 The functional build volume depends on the parts/materials.

2 Farsoon's Beam Shaping Technology can offer even larger layer thickness. Contact us for more details.

3 The materials marked with * are in the build process development.

Many factors may affect the performance characteristics of products. We recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. Farsoon makes no warranties of any type, express or implied, including but not limited to, the warranties of merchantability or fitness for a particular use. This also applies regarding the consideration of possible intellectual property rights as well as laws and regulations. Farsoon reserves the right to change the technical data without notice. Farsoon®, Buildstar®, Makestar® are registered trademarks of Farsoon Technologies. Last Change: 2026-04



COMBUSTION CHAMBER OF ROCKET ENGINE

MATERIAL: IN718

SYSTEM: FS621M Pro

SIZE: 550×550×780 MM (21.7×21.7×30.7 IN)

PARTNER: DEEP BLUE AEROSPACE

www.farsoon-gl.com

AMEA Farsoon Technologies Co., Ltd. | +86.731.8397.6198 | globalinfo@farsoon.com | No. 2710 Yuelu West Boulevard, Yuelu District, Changsha, Hunan, China

AMERICAS Farsoon Americas CORP. | +1 512-551-9901 | contact@farsoonam.com | 3161 Eagles Nest Street, Suite 350, Round Rock, TX 78665

EUROPE Farsoon Europe GmbH | +49 70316325822 | wehelpyou@farsoon-eu.com | Industriestraße 5/1, 71069 Sindelfingen, Germany

FS621M

Industrial Scale Metal Laser Sintering System

► www.farsoon-gl.com



EXTRA-LARGE BUILD VOLUME WITH 1.1 METER VERTICAL AXIS

Developed with a focus on large build size, Farsoon's FS621M features one of the largest metal laser sintering build volumes on market, with a build plate size of 620×620mm and vertical axis of 1.1 meter. This expansive build envelope opens new possibilities for large-scale metal production that couldn't be built before in industries such as aerospace, oil and gas, and many others.

BUILD SPEED + HIGH QUALITY

The FS621M can be equipped with powerful hexa 500W lasers or quad 500W or 1000W lasers allowing for great rates of production. In addition the FS621M like all Farsoon systems is a truly open platform which offers the user a high degree of control to tailor build parameters for cost-competitive metal additive manufacturing. The powerful build process controls & real-time recoating monitoring ensuring the best build quality.

OPTIMIZED FOR OPERATIONAL EASE

The FS621M's integrated filter module features secondary circulating system and a dual-station filter design that allows for the exchanging of filters without disturbing the build process. The FS621M powder handling processes share a common powder container design which are used during loading, unloading and sieving procedures. These containers offer fully-sealed power handling, easy transportations between the stations, and safe storage of powder. This partially closed powder system allows for the capability of continuous feeding of powder to the build while retaining the ability to easily exchange and monitor powder quality.

FARSOON FS621M

TECHNICAL DATA	FS621M-6	FS621M-4
External Dimensions (L×W×H)	5890×4350×3940mm (231.9×171.3×155.1 in)	
Build Cylinder Size (L×W×H)	620×620×1100mm (24.4 × 24.4 × 43.3 in) (Height incl. build plate)	
Effective Build Size¹ (L×W×H)	612×612×1100 mm (24.1×24.1×43.3 in) (Height incl. build plate)	
Net Weight	Approx. 8000 kg (17637.0 lb)	
Layer Thickness²	0.02~0.1 mm (0.0008-0.0039 in)	
Scanning Speed	Max. 10 m/s (32.8 ft/s)	
Laser Type	Fiber Laser, 6×500W	Fiber Laser, 4×500W, Optional 4×1000W (Beam Shaping)
Scanner	F theta lenses	
Inert Gas Protection	Argon/Nitrogen	
Average Inert Gas Consumption in Process	8 - 10 L / min	
Operating System	64 bit Windows 10	
Comprehensive Software	BuildStar, MakeStar®	
Key Software Features	Open machine key parameters, real-time build parameter modification, three-dimensional visualization, diagnostic function, support-add function	
Data File Format	STL	
Power Supply	EUR/China: 400V±10%, 3~/N/PE, 50Hz, 60A/80A US: transformer sold with machine	
Operating Ambient Temperature	22-28°C (71.6-82.4°F)	
Materials³	HX, IN718, HAYNES 230, 316L, 304L, Ti6Al4V, TA15, AlSi10Mg, GH4099*, CuCrZr*, IN625*, more materials to come	

¹ The functional build volume depends on the parts/materials.

² Farsoon's Beam Shaping Technology can offer even larger layer thickness. Contact us for more details.

³ The materials marked with * are in the build process development.

Many factors may affect the performance characteristics of products. We recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. Farsoon makes no warranties of any type, express or implied, including but not limited to, the warranties of merchantability or fitness for a particular use. This also applies regarding the consideration of possible intellectual property rights as well as laws and regulations. Farsoon reserves the right to change the technical data without notice. Farsoon®, Buildstar®, Makestar® are registered trademarks of Farsoon Technologies. Last Change: 2026-04



COMBUSTION CHAMBER OF ROCKET ENGINE
 SIZE: 600 (L)*496 (W)*558 (H) MM
 MATERIAL: IN718
 LAYER THICKNESS: 0.04MM
 MACHINE: FS621M QUAD LASERS
 PRINT TIME: 258H

www.farsoon-gl.com

AMEA Farsoon Technologies Co., Ltd. | +86.731.8397.6198 | globalinfo@farsoon.com | No. 2710 Yuelu West Boulevard, Yuelu District, Changsha, Hunan, China

AMERICAS Farsoon Americas CORP. | +1 512-551-9901 | contact@farsoonam.com | 3161 Eagles Nest Street, Suite 350, Round Rock, TX 78665

EUROPE Farsoon Europe GmbH | +49 70316325822 | wehelpyou@farsoon-eu.com | Industriestraße 5/1, 71069 Sindelfingen, Germany