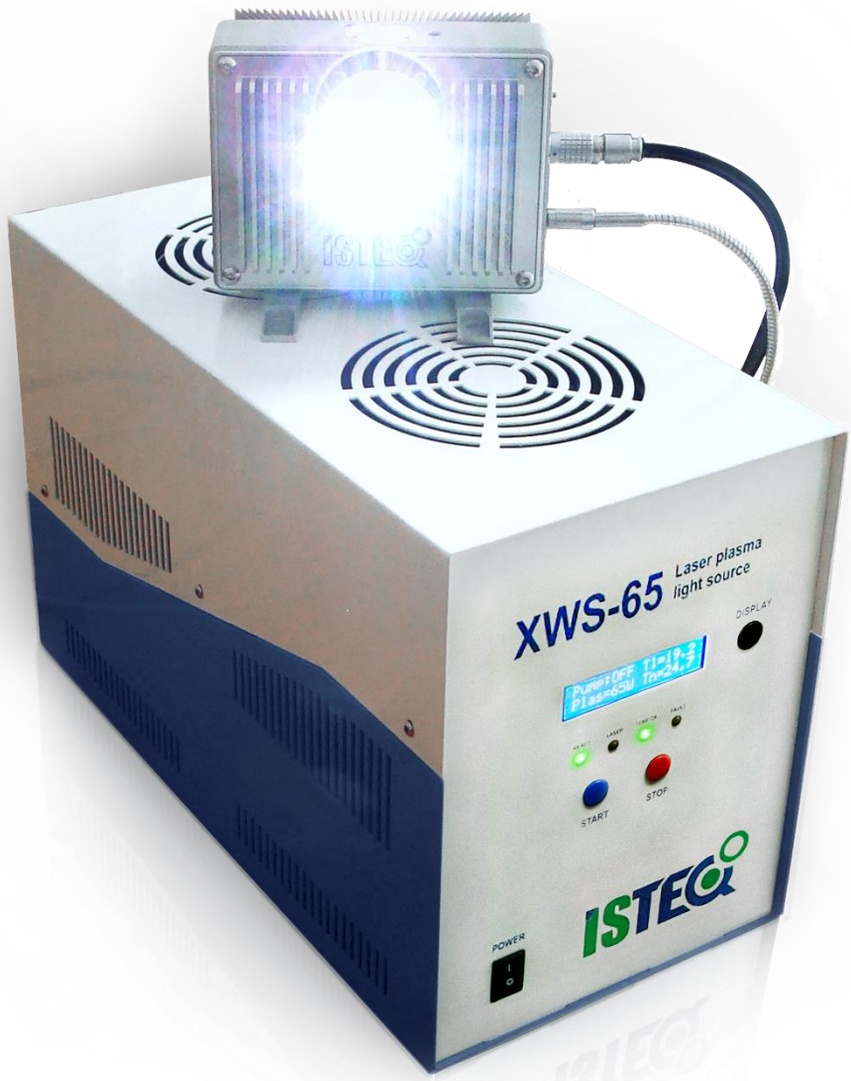
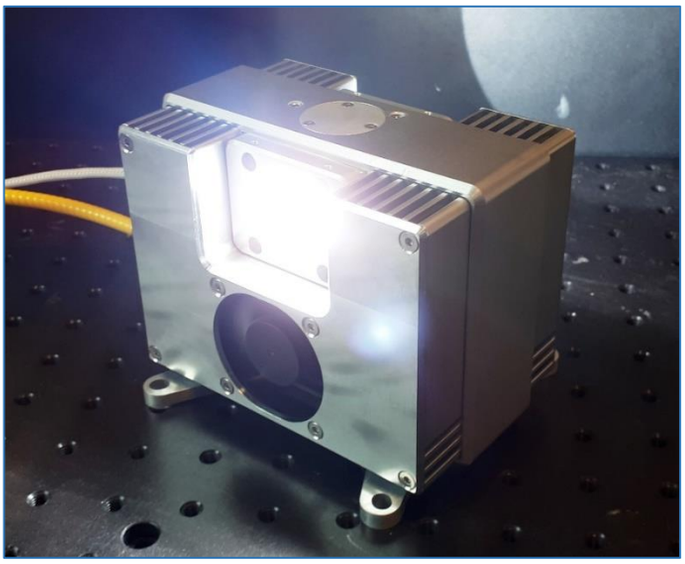


Broadband plasma light sources - Modifications

XWS-Dual port: Free space and FCU versions



XWS Dual port Free Space

XWS Dual port FCU

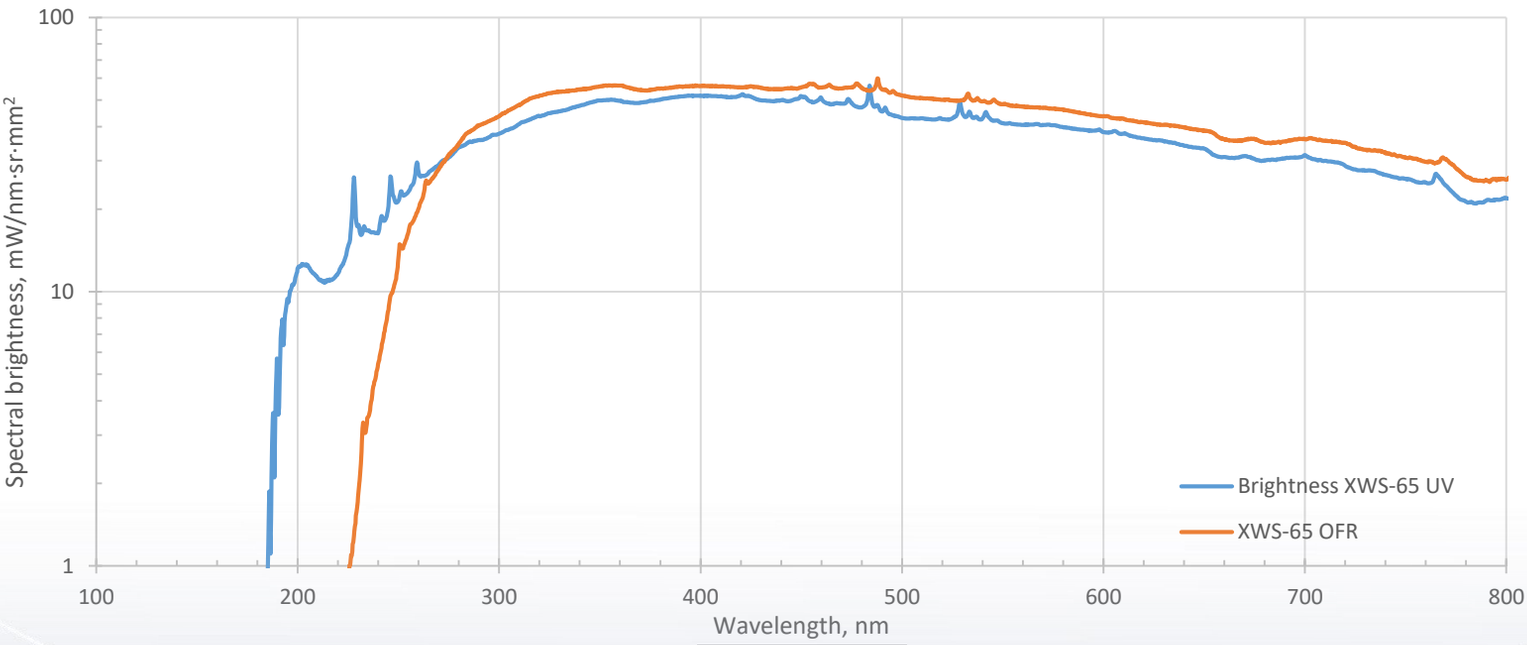
Special features:

- Dual beam light source with identical parameters for each port
- Developed on XWS-65 base
- Spectral brightness: up to 55 mW/(mm2·sr·nm)
- High stability: STD <0.15%

FCU version:

- SMA or FC fiber interface
- Output power up to 0.5W after each fiber

Spectral brightness of XWS-Dual port light source in UV and VIS spectral region

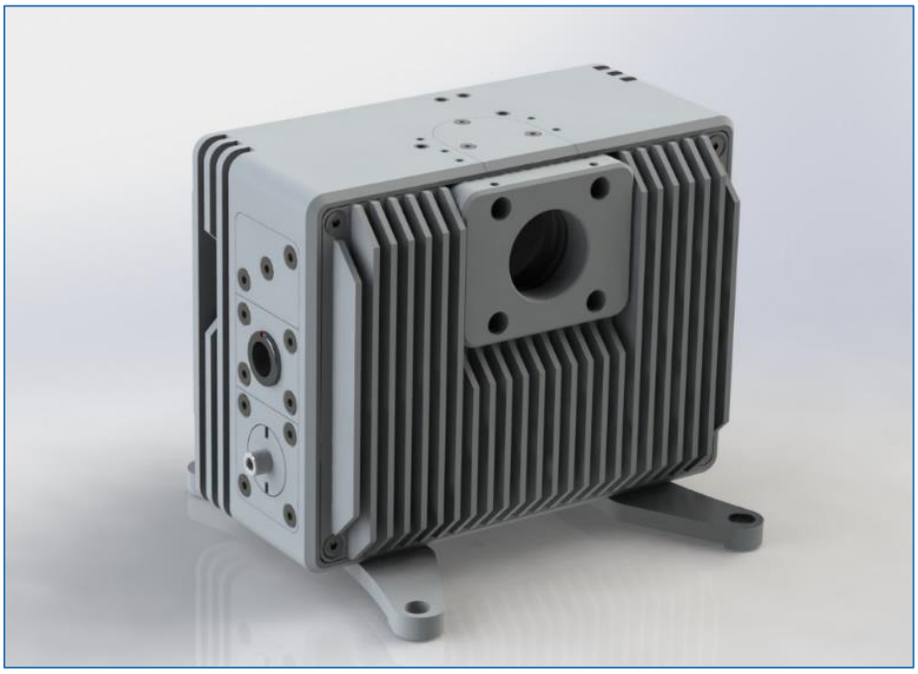


XWS-Dual port: Free space and FCU versions

Source specifications

XWS-Dual port performance	
Spectral range	190 - 2500nm for UV configuration, 250 - 2500nm for OFR configuration
Spectral brightness	Up to 55mW/(mm^2·nm·sr)
Output power	Up to 3 W free space per port Up to 0.5 W via fiber per port
Lamp medium	Xenon
Emitting body size	250×500um
Lifetime	10,000 hours
Temporal and spatial stability	STD < 0.15%
Optical design	
Output NA by default	0.4, up to 0.55 upon request
External optic interface by default	C-mount
Optional output interface:	Thorlabs SM1, 30mm cage and more
Fiber interface (only for FCU version)	SMA or FC
Optional configurations	
Source spectrum	UV or Ozone free
Light output	Free space or fiber coupled
Optical head cooling unit	Air cooling
Power Supply Unit (PSU) cooling system	Air or water cooling
Additional	
Connection to PC/Laptop	Ethernet (Web interface), COM-port (RS232)
Interlock	Db-15 connector
Remote plasma control	Db-15 connector
System dimensions and weight	
Optical head FCU	130 × 154 × 74mm, 2kg
Power supply unit	351 × 172 × 232mm, 8kg
Facility requirements	
Electrical	100-240V, 50/60Hz
Gas purging (only for UV configuration)	Nitrogen or Argon purging, 1l/min

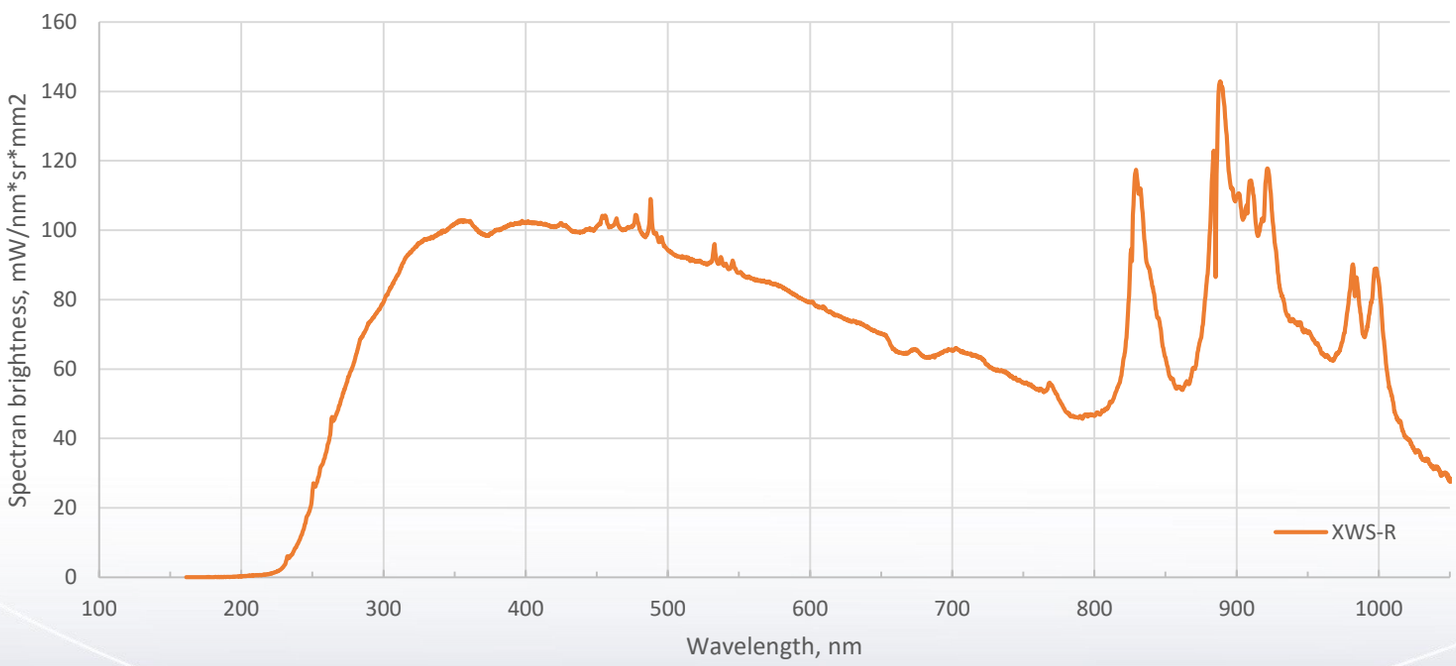
XWS-R high power light source



Special features:

- High power version: almost doubled output power/brightness in comparison to default XWS-65
- Spectral brightness: up to 100 mW/(mm2·sr·nm)
- Can be done in both: Free space and FCU configuration
- Up to 1W of output power after a fiber (for FCU version)

Spectral brightness of XWS-R light source in UV and VIS spectral region



XWS-R high power light source

Source specifications

XWS-R performance	
Spectral range	190 - 2500nm for UV configuration, 250 - 2500nm for OFR configuration
Spectral brightness	Up to 100mW/(mm^2·nm·sr)
Output power	Up to 5 W free space per port Up to 1 W via fiber per port
Lamp medium	Xenon
Emitting body size	350×750um
Lifetime	10,000 hours
Temporal and spatial stability	STD < 0.15%
Optical design	
Output NA by default	0.4, up to 0.55 upon request
External optic interface by default	C-mount
Optional output interface:	Thorlabs SM1, 30mm cage and more
Fiber interface (only for FCU version)	SMA or FC
Optional configurations	
Source spectrum	UV or Ozone free
Light output	Free space or fiber coupled
Optical head cooling unit	Air cooling
Power Supply Unit (PSU) cooling system	Air or water cooling
Additional	
Connection to PC/Laptop	Ethernet (Web interface), COM-port (RS232)
Interlock	Db-15 connector
Remote plasma control	Db-15 connector
System dimensions and weight	
Optical head FCU	130 × 130 × 74mm, 2kg
Power supply unit	351 × 172 × 232mm, 8kg
Facility requirements	
Electrical	100-240V, 50/60Hz
Gas purging (only for UV configuration)	Nitrogen or Argon purging, 1l/min