



## Water-Cooled Acousto-Optic Q-Switch

I-QS027-4S4V2-x5-ST1

A custom version of our Stallion Q-Switch, optimised for use at 1550nm.

The patented 'Stallion' manufacturing technique provides superior corrosion resistance whilst maintaining optimum performance and RF power handling capabilities up to 100W.

Combining top grade Crystal Quartz with high quality optical finishing and in-house anti-reflection coatings, this Q-Switch exhibits very low insertion loss and high damage threshold.

In addition to the standard product shown, custom configurations are available for specialised applications. These include alternative housing options, wavelengths and RF frequencies.

Our scientists and engineers are available to assist in selecting the most appropriate model of Q-Switch and also RF driver for your application.

Please contact the sales team for further information.

### Key Features:

- 1550nm
- Superior corrosion resistance
- Stainless steel cooling channels
- High damage threshold
- Push fit water-connectors
- Custom configurations available

### Application examples:

- Material processing
- Medical
- Scientific

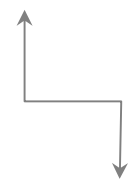
### General Specifications

Interaction material:	Infrasil (water-free fused silica)
Wavelength:	1550nm
Polarisation:	Any
AR coating reflectivity:	< 0.2% per surface
Damage threshold:	> 500MWcm <sup>-2</sup>
Transmission (single pass):	> 99.6%
RF Frequency:	27.12MHz
Acoustic mode:	Shear
Active aperture:	4.0mm
VSWR:	< 1.2:1 (<1.4:1 at 50W RF power)
Loss modulation:	> 60%
RF power rating (maximum):	100W
Water flow rate:	> 0.2l / minute
Water-cooling channel material:	Stainless steel 316
Recommended water temperature:	+22°C to +32°C
Thermal switch cut-off:	+55°C +/- 5°C
Storage temperature:	0 to +50degC

### Ordering Codes

**Example: I-QS027-4S4V2-P5-ST1** (Q-Switch, 27.12MHz, 4mm active aperture, shear mode, Fused Silica, 1550nm, 6mm OD straight push fit water-connectors, BNC, Stallion housing with M3 mounting holes)

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Code	Water connector
N	4mmOD straight push fit
P	6mmOD straight push fit
Q	4mmOD right angle push fit
U	6mmOD right angle push fit

