

2-AXIS PACKAGED SCAN HEADS XLR8 AND XTREME SERIES



CONFIGURED TO ACCEPT XY2-100 DIGITAL INPUT SIGNALS
AVAILABLE WITH FIBER LASER SCAN KITS
APERTURE RANGE - 7MM TO 20MM

OPTIONAL 20MM DIGITAL BEAM SHUTTER
WIDE SELECTION OF SCAN LENSES
AFFORDABLE

Nutfield Technology's Packaged 2-Axis Scan Heads provide X/Y deflection capability for all laser applications. Heads consist of two galvanometers, two mirrors, 2 servo-amplifiers, and communication electronics. The synchronized actions of two turning mirrors direct the laser beam to specific locations on a target material surface. Adapters are available for a wide range of f-theta focusing lenses.

Nutfield Technology's XLR8 Series Packaged 2-Axis Scan Heads provide excellent value as the building block for the construction of a laser beam positioning system. Available in 7mm and 10mm mirror apertures for a variety of wavelengths, the XY-100 digital interface integrates with PC based hardware and software packages for marking and micromachining. Analog input versions are also available.

The Xtreme Series Packaged 2-Axis Scan Heads provide superior high speed performance for demanding laser applications. Available in 10mm, 15mm, and 20mm apertures, and for various wavelengths, the Xtreme also integrates the XY-100 digital interface with PC based hardware and software packages for marking and micromachining. Analog input versions are also available. Featuring the QS-12 OPD with Nutfield's Optical Position Detector, the Xtreme series packaged scan heads are a perfect building block for your laser beam positioning system. Innovative QS-12 galvo rotor and mirror mount designs reduce resonances, producing faster scanning.

Both of Nutfield Technology's Packaged Scan Head series are easily interfaced with Nutfield's WaveRunner Scan Control Software and Pipeline/Surfboard Control Hardware.

Since 1997, Nutfield Technology has been designing and manufacturing the most advanced galvanometer-based optical scanners, scan heads, laser control electronics, and software products available. Founded by laser and laser scanning industry veterans, Nutfield offers a wealth of knowledge and expertise to select the proper products suited to any application. Contact Nutfield Technology today for solutions.



APPLICATIONS:

// MARKING

// SOLAR SCRIBING

// WELDING WITH METAL OR PLASTIC

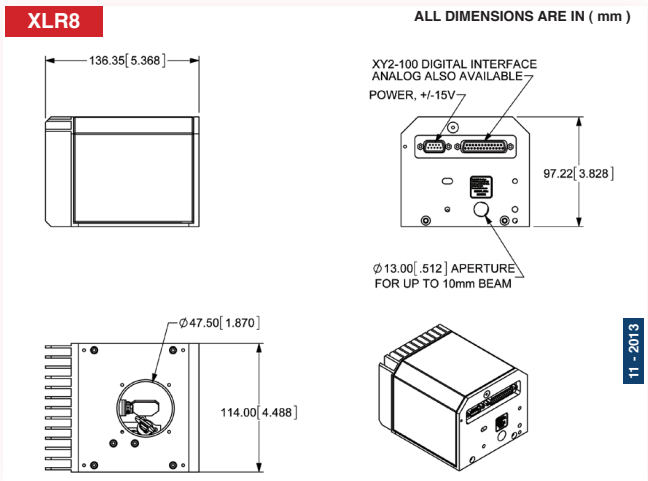
// MICROMACHINING

// TEXTILES CUTTING AND PATTERNING

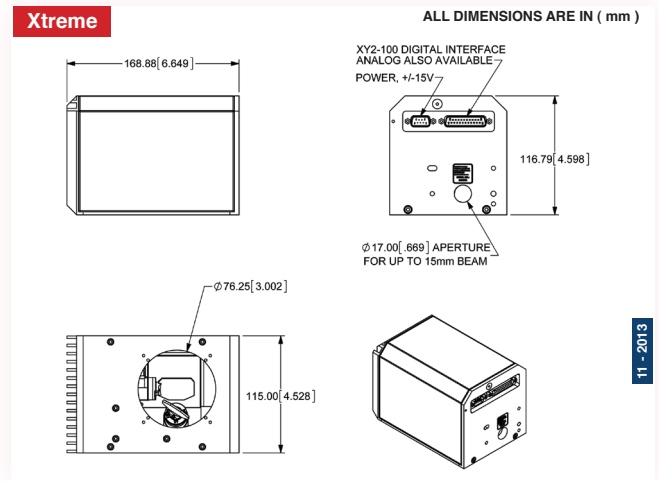
// SURFACE TREATMENT

SPECIFICATIONS

Packaged Scan Head Series	XLR8	Xtreme
Performance		
Optical:		
Scan Angle	±22.5°	±22.5°
Resolution	16 μrad	10 μrad
Linearity	99.90%	99.90%
Repeatability	20 μrad	10 μrad
Gain Drift	<100 ppm/°C	70 ppm/°C
Offset Drift	15 μrad	15 μrad
Dynamic		
Step Response (1% of full scale, 99% settled)		
XLR8-7 w/7mm Aperture	230μs	
XLR8-10 & XTREME-10 w/10mm Aperture	350μs	300μs
XTREME-15 w/15mm Aperture		345μs
XTREME-20 w/20mm Aperture		404μs
Power Supply		
Voltage	±15 volts	±15 volts Max volts ±18
Current (RMS)	±3 Amps	±3 Amps Peak ±10A
Control Interface		
Digital	XY2-100	XY2-100
Analog (volts)	±5, ±10	±5, ±10 Pre-configured at Nutfield
Environmental		
Operating Temp	0° - 40° C	0° - 40° C
Storage Temp	-10 - 60° C	-10 - 60° C
Humidity (RH)	≤80%	≤80% Non-condensing
Mechanical		
Weight	1.4 kg	1.8 kg



SHOWN IS THE XLR8-10. THE XLR8 IS ALSO AVAILABLE IN 7MM.



SHOWN IS THE XTREME-15. THE XTREME IS ALSO AVAILABLE IN 10MM AND 20MM.