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Coherent® LightSmyth™ 1528 - 1610nm, 940.07 Grooves/mm, 27 x 10mm Transmission Diffraction Grating

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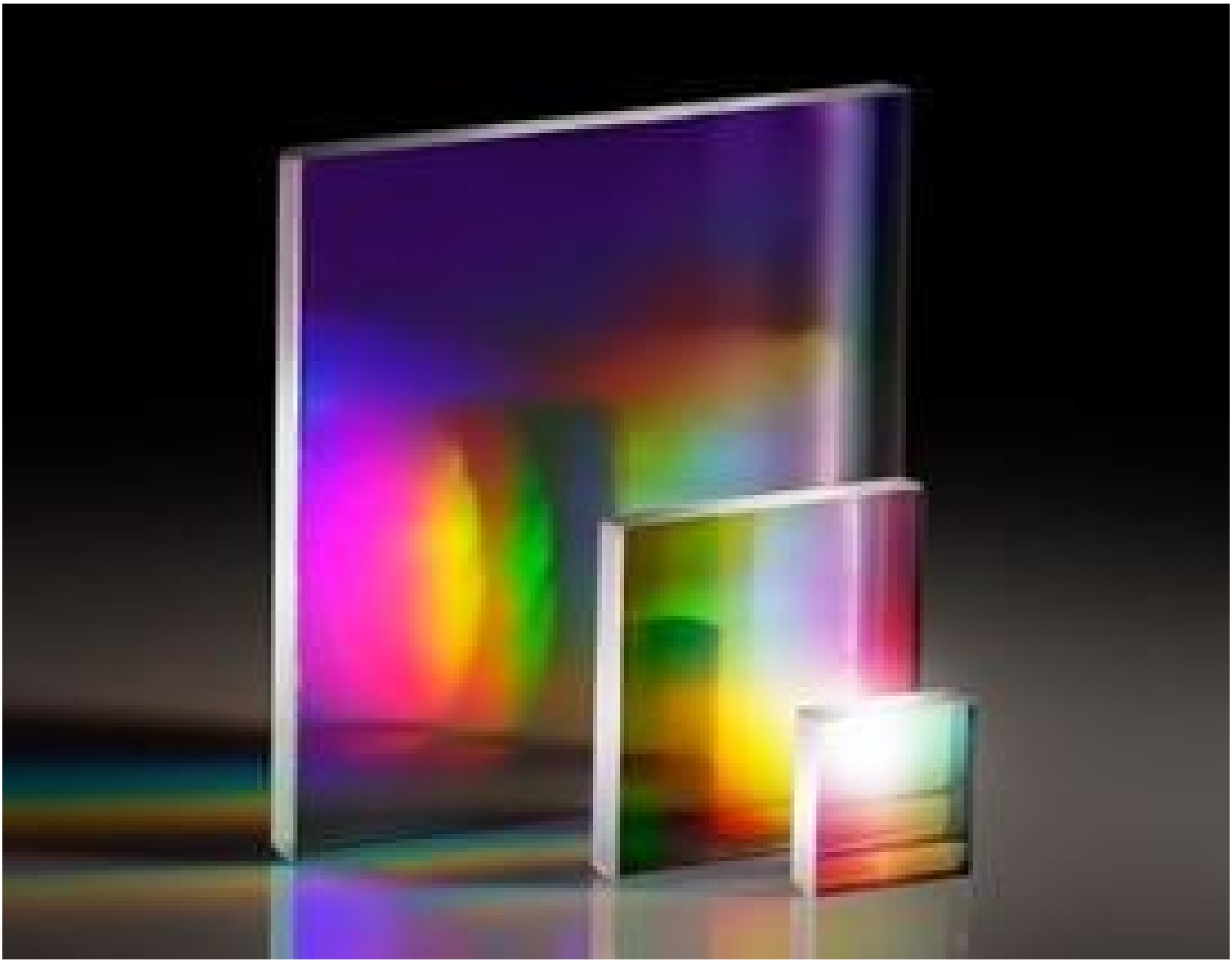

LightSmyth™ Transmission Diffraction Gratings

Stock **#16-877** CONTACT US

- 1 + **€650**.00

ADD TO CART

Volume Pricing	
Qty 1-9	**€650,00** each
Qty 10-24	**€585,00** each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Model Number:
1304261

Type:
Transmission Diffraction Grating

Note:

S-Polarization defined with E-field parallel to the grating grooves

Physical & Mechanical Properties

Groove Density Uniformity (grooves/mm):
0.001

Dimensions (mm):
27.00 x 10.00

Clear Aperture CA (mm):
26.00 x 9.00

Construction:
Multi-Layer Dielectric Binary Etch Grating

Length (mm):
27.00

Thickness (mm):
0.68 ±0.050

Width (mm):
10.00

Alignment of Grooves to Edge (°):
0.1 (typical)

Optical Properties

Groove Density (grooves/mm):
940.07

Wavelength Range (nm):
1528 - 1610

Minimum Efficiency (%):
≥92 @ 1528 - 1610nm

Angle of Incidence (°):
47.5

Coating:
Dielectric

Substrate:
Fused Silica (Corning 7980)

Surface Quality:
60-40

Polarization:
S and P

Regulatory Compliance

Certificate of Conformance:
View

Product Details

- High Diffraction Efficiency (>94% Absolute) and Low Scatter
- Polarization Independent and Single Polarization Optimized Gratings
- Robust Inorganic Materials for Superior Power Handling and Reliability
- Designs for NIR Wavelengths between 800 - 1800nm

Coherent® LightSmyth™ Transmission Diffraction Gratings are manufactured through a precision lithographic wafer-scale fabrication process and provide excellent optical performance, low polarization sensitivity, and low scatter. These gratings have a high diffraction efficiency of ≥94%, minimizing optical losses when used in multi-pass configurations. Gratings designed for near infrared (NIR) wavelengths between 800 - 1800nm are available with all featuring a precision line density uniformity of 0.001 lines/mm. Coherent® LightSmyth™ Transmission Diffraction Gratings are used in demanding applications including Spectral Beam Combining (SBC), LiDAR, optical telecommunications, pulse compression of pico- and femtosecond pulses, and spectroscopy. These gratings contain no organic materials and can be used with high power lasers and in environments up to 500 °C with no effects on performance. Please contact us for custom sizes or OEM requirements.

Note: II-VI Incorporated is now Coherent Corp.

Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our **Optics Cleaning Resources** for step-by-step guides and best practices. For personalized assistance, **Email us** or **Chat** with our technical support team.

Component Handling Tools

Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**