

LIGHTEL

Component Workstations

LTL-H2-500-2

Hydrogen Gas Generator

Affordable. Pure. Simple.

Lightel's workstations require high purity hydrogen in order to taper and fuse the optical fibers and fabricate the optical components. Hydrogen cylinders can be difficult to replenish and maintain. Consequently, Lightel offers the LTL-H2-500-2 as an optional adjunct hydrogen generator with all of its workstations.

The Lightel LTL-H2-500-2 is a high purity gas generator designed for gas chromatography and other applications. The unit uses high purity de-ionized water with Solid Polymer Electrolyte (SPE) technology to provide hydrogen with a purity of 99.999%. The LTL-H2-500-2 directly electrolyzes water without an alkali solution, effectively preventing electrolytic cell corrosion.

At only 40 x 36 x 22cm, the LTL-H2-500-2 is a low maintenance, compact bench top unit with the quality hydrogen required for most manufacturing applications.



Features

- Accurate gas flow control has been statistically shown to increase production yields
- Uses only de-ionized water, no chemicals
- Eliminates the need for stand-alone hydrogen cylinders
- Non-alkali based system eliminates corrosion
- High gas purity provides hydrogen with an oxygen residue of < 3 PPM

→ Filters

Each LTL-H2-500-2 has two gas filtering stages to ensure the output H2 purity $\geq 99.999\%$. The two filter materials include 'Indicating Silica Gel' beads and 'Molecular Sieve' beads, which need to be replaced or reactivated upon reaching saturation.



Indicating Silica Gel



Molecular Sieves

→ Specifications

H2 Gas	
Hydrogen Purity	99.999%
Oxygen Content	< 3 ppm
Water Content Dew Point	-56°C
H2 Flow Control	
Flow Rate Range	0-500 ml / min
Output Pressure	0 - 4 Kg / cm ² (~0.4 MPa)
Pressure Stability	< 0.001 MPa
Power	
Power Supply	110 (± 10%, 60 Hz) or 220 (±10%, 50 Hz) VAC
Power Consumption	250 W
Mechanical	
Outer Dimensions	400 x 360 x 220 mm
Net Weight	~ 14 Kg
Environmental	
Ambient Temperature	1 - 40°C
Relative Humidity	< 85%
Ordering Information	
LTL-H2-500-2-110	Hydrogen generator, 110 VAC
LTL-H2-500-2-220	Hydrogen generator, 220 VAC