

Affordable. Pure. Simple.

The LIGHTEL LTL-H2-500 is a high-purity hydrogen gas generator designed for gas chromatography and other applications. As a gas source, this generator has been widely used with LIGHTEL's flame-based optical fiber fusion workstations to produce fused coupler/taper products with high quality and high reliability.

The LTL-H2-500 is based on the electrolytic principle, utilizing potassium hydroxide as the electrolytic solution and a noble metal as the electrode. Hydrogen is produced by the electrolysis of distilled or de-ionized water and then a membrane-separation method fully separates the hydrogen and oxygen. The transient metal catalytic technology adopted in the electrolytic cell allows an excellent gas purity of hydrogen with an oxygen residue of < 3PPM.

At only 37 x 33 x 18cm the LTL-H2-500 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
- Distilled water and other consumables are easily replaced
- High gas purity provides hydrogen with an oxygen residue of < 3PPM

→ Filters

Each LTL-H2-500 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 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
'Low' Pressure Range Setting	0 – 2 (or 0~0.2) Kg / cm ² (or MPa)
'High' Pressure Range Setting	0 – 4 (or 0~0.4) Kg / cm ² (or MPa)
Pressure Stability	<0.001 MPa
Power	
Power Supply	110 or 220 (±10%, 50Hz) V
Power Consumption	250 W
Operating Conditions	
Operating Temperature	5-40 °C
Relative Humidity	<85%
Mechanical	
Outer Dimensions	370 x 330 x 180 mm
Net Weight	~ 10 Kg