



Leman Instruments

H2-N2 STATION ULTRA RC: ULTRA HIGH PURITY HYDROGEN & NITROGEN GENERATORS WITH ON BOARD COMPRESSOR



H₂ + N₂

APPLICATIONS

- ✓ Make up gas, GC-FID
- ✓ Carrier gas for GC

DESCRIPTION

LEMAN-INSTRUMENTS designed the **H2-N2 STATION ULTRA RC** product line of **Ultra High Purity Hydrogen & Ultra High Purity Nitrogen generators with compressor** to supply independently H₂ & N₂, carrier gas for GC, close to the consumer in an elegant casing with full color display and touchscreen.

The H₂-N₂ Station is composed of a High Purity Hydrogen Generator, an Nitrogen generator and an oil free piston AIR compressor.

Based on the field proven Solid Polymer Electrolyte (PEM) cell technology, pure Hydrogen is produced at low pressure from electricity and high quality distilled water. After production, H₂ is dried by a passive dryer. It is available 24/7 with constant purity >99.999%. Output pressure is regulated electronically and could be set from 0.5 to 7 bar. This process can be started on demand and does not require any caustic solution.

N₂ is dried and purified or extracted by the Pressure Swing Adsorption (PSA) technology. N₂ output pressures are regulated from 0.5 to 5 bar.

Gases are available 24/7 with constant purity.

Each instrument is equipped with high performance communication interfaces USB, RS485 & Ethernet as standard, (WLAN as options) to create a very flexible gas network with local or central control.

Due to the software being focused on safety, automatic regulation and reliable communications, the **H2-N2 STATION ULTRA RC** is easy to install, reliable, safe and pleasant to operate.

BENEFITS

- ✓ Reduces in operation costs. Return on investment within 15 months.
- ✓ Improves resolution and detection limit versus Helium only usage. Provides High pressure stability.
- ✓ N₂ and Zero Air available 24/7 at constant purity. No contamination.
- ✓ Independent source of Nitrogen and Zero Air that does not require any piping and can be easily moved around the laboratory. Remote control from PC, I-phone and tablet
- ✓ Low noise compressor
- ✓ Very safe operation, internal leak-test, automatic shut-down, over-pressure valve, current and voltage limits.
- ✓ No handling and storage of cumbersome gas cylinders. No cylinder rental fee.
- ✓ Long life compressor with power economy function.

H2-N2 STATION ULTRA RC

SPECIFICATIONS

| | |
|---------------------------------------|--|
| Models | H2-N2 STATION ULTRA RC-160/500 (Other Configuration available on request) |
| Outflow capacities @ 1013/20°C | H2-N2 STATION ULTRA RC-160/500 : 160 Nml/ min H2 & 500 Nml/min N2 |
| H2 purity | >99.9999% (maximum HC content : 0.05ppm), Dew point -75°C |
| N2 purity | > 99.9999% ; < -75°C dew point, < 1 ppm H2O, particulates <0.1µm; <0.05ppm HC-CH4 |
| Outlet Pressures | H2: from 0.5 to 7 bar (7 to 100 psig), adjustable by software. N2: from 0.5 to 5 bar (7 to 70 psig), adjustable by software |
| Compressed Air | Supplied by internal oil free piston compressor |
| Sound pressure | < 55 dB(A), measured at 1m |
| Manual control | Through a 4.3" TFT-LCD color display with touch screen, located on the front panel. Display of major parameters, functioning status and alarms. Intuitive navigation to functions by menus and sub menus. |
| Remote control, Communications | <ul style="list-style-type: none">■ USB. RS485 (Mod-Bus) or Display■ Trough Ethernet 10/100 network■ Trough WLAN network, with PC, I-Phone, tablet (option)■ Log book download by USB |
| Outlet fittings | Stainless steel 1/8" OD compression |
| Power supply | 110VAC to 130 VAC 50 to 60 Hz; 220 to 260VAC, 47 to 63 Hz |
| Power consumption (max at full flow) | H2-N2 STATION ULTRA RC-160/500 : maximum 650W |
| Dimensions | W=483mm/19ins, H=265mm/10.5ins (3U), D=520mm/21ins |
| Net weight | H2-N2 STATION ULTRA RC-160/1500 : 41 Kg |
| Certification | CE |

ORDERING NUMBERS

| Model | Article # |
|--------------------------------|-----------|
| H2-N2 STATION ULTRA RC-160/500 | 727601 |

| Model | Article # |
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