

Modular hydrogen refueling station

Liquid-to-gas series | For light and heavy-duty vehicles 350/700 bar



With more than 260 hydrogen stations delivered all over the world, Air Liquide provides **global hydrogen refueling solutions** from project definition to operation and maintenance support.

Part of the liquid-to-gas series, the modular station ranges for **light and heavy-duty vehicles** can supply **gaseous hydrogen at 350 and 700 bar using liquid hydrogen** as a source. The modularity of the station enables support for different layouts and types of projects with a capacity up to several tons per day.

Key benefits

- ✓ Refueling of large fleets at 350/700 bar
- ✓ Highly efficient liquid hydrogen pump
- ✓ Optimization of CAPEX

LIQUID-TO-GAS SERIES



ALL-IN-ONE
From light-duty 700 bar to heavy-duty 350 bar



MODULAR
For light and heavy-duty vehicles 700 bar







MODULAR
For heavy-duty vehicles 350 bar

Modular hydrogen refueling station

Liquid-to-gas series | For light (LD) and heavy (HD) duty vehicles 350/700 bar

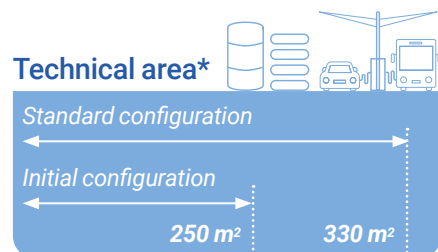
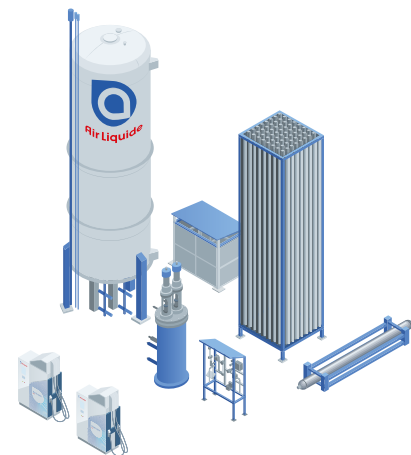
Performances

	Initial configuration	Standard configuration
 Dispenser(s)	1 x H70 single (HD) Dual H70 /H35 (HD/LD) in option ⁽¹⁾	2 x H70 single (HD) Dual H70 /H35 (HD/LD) in option ⁽¹⁾
 LH₂ pump(s)	1 LH ₂ pump	2 LH ₂ pumps
 Max. vehicles in 1 hour	4 trucks (60 kg each)	8 trucks (60 kg each)
 24h capacity	240 kg/h⁽²⁾ × hours of operation	480 kg/h⁽³⁾ × hours of operation

⁽¹⁾ No simultaneous refueling on dual dispenser.

⁽²⁾ Average refueling flow rate of the station based on SAEJ 2601-5 protocol.

⁽³⁾ Average refueling flow rate of the station based on SAEJ 2601-5 protocol with 2 LH₂ pumps.

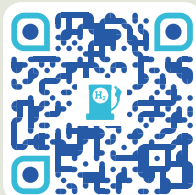


* Source trailers and dispensers excluded.

Technical specifications

Fueling time	<ul style="list-style-type: none">• H70 - light-duty: 5 kg < 5 min• H70 - heavy-duty: 60 kg < 15 min• H35 - heavy-duty: 35 kg < 12 min
Noise	< 85 dBA at 1 m
Utilities	<ul style="list-style-type: none">• 480 V, 3 phases, 60 Hz, 350 kVA and 700 kVA for standard configuration• Compressed air system included• Nitrogen for maintenance purposes only
Safety	<ul style="list-style-type: none">• Hydrogen / flame detection• Emergency stop buttons• Flare adapted to urban use
Environment	Ambient operating temperature: -20°C to +45°C <ul style="list-style-type: none">• ASME sect VIII, div 1/ (div 3)• ASME B-31.3 / ASME B-31.12• ISO 19880-1• EIGA IGC 15/06 Guidelines for gaseous hydrogen station• SAE J2601-1 2016 version (including MC method) for light-duty vehicles / SAE J2601-5 for heavy-duty vehicles / SAE J2600 / SAE J2799 / NFPA-2 / NFPA-55 / NFPA 70 / NFPA 496• CE upon request
Codes and standard	

Discover our complete range of hydrogen refueling stations:



Contact us

ww-h2refuelingstations@airliquide.com

www.advancedtech.airliquide.com

Modularity

Compatible hydrogen sources

- Liquid hydrogen trailer
- LH₂ tank: up to 4,300 kg
- Liquid ground storage: horizontal or vertical
- Advanced delivery panel for LH₂ trailer offloading for supply chain optimization and BOG management

Compression and storage

- LH₂ high pressure pump, Air Liquide proprietary design
- 98% availability - higher level of redundancy upon request

Dispensers

- Up to 4 dispensers per station
- Parallel refuellings possible
- Adaptable branding and colors

Services & maintenance support

- Preventive and corrective maintenance contract
- Technical assistance and training
- Spare parts supply
- Remote control for operation and assistance