Modular hydrogen refueling station

Liquid-to-gas series | For heavy-duty vehicles 350 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 for 350 bar **is focused on heavy-duty hydrogen vehicles**. It can supply **gaseous hydrogen 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 3,500 kg per day.

Key benefits

- Refueling large fleets at 350 bar
- Highly efficient liquid hydrogen pump
- No-fog vaporizer technology or ambient vaporizer
- CAPEX and OPEX optimized design for 350 bar dispensing
- Redundancy options available upon request

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

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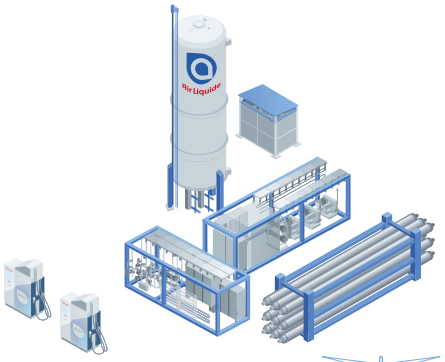
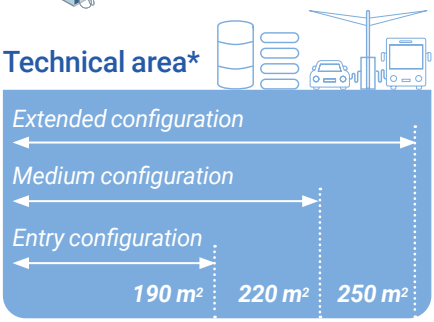
Performances

	Entry configuration	Medium configuration	Extended configuration
Dispenser(s)	1 x H35 (HD)	2 x H35 (HD)	3 or 4 x H35 (HD)
LH_2 pump(s)	1 LH_2 pump	2 LH_2 pumps	3 LH_2 pumps
Max. vehicles in 1 hour	**4 buses** (35 kg each)	**8 buses** (35 kg each)	**12 - 14 buses** (35 kg each)
Capacity over 8 hours	**1,120 kg** (32 buses)	**2,240 kg** (64 buses)	**3,360 - 3,920 kg** (112 buses)



Technical area*



** Source trailers and dispensers excluded.*

Technical specifications

Fueling time	H35 - Heavy duty: 35 kg in 12 min
Noise	< 85 dBA at 1 m
Utilities	• 480 V, 3 phases, 60 Hz, 400 kVA • Compressed air system included • Nitrogen for maintenance purposes only
Safety	• Hydrogen / flame detection • Emergency stop buttons • Flare adapted to urban use
Environment	Ambient operating temperature: -20°C to +45°C
Codes and standard	• 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 2016 version (including MC method) / SAE J2600 / SAE J2799 • NFPA-2 / NFPA-55 / NFPA 70 / NFPA 496 • CE upon request

Modularity

Compatible hydrogen sources

- Liquid trailer and ground storage - possible source in parallel
- Liquid ground storage: horizontal or vertical

Compression and storage

- LH_2 pump with discharge pressure at 450 bar/max. 3 LH_2 pumps per station
- Number of pumps and MP storage capacity upon request
- 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

Discover our complete range of hydrogen refueling stations:

Contact us

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