

# Modular hydrogen refueling station

## For heavy-duty vehicles 350 bar



With more than 200 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 modular refueling station product line, the station dedicated to heavy-duty vehicles can supply gaseous hydrogen at **350 bar** dispensed through a safe protocol for fast refueling.

The modularity of the station enables support different layouts and use cases with a capacity from **1 to 4 ton per day**.

## Key benefits

- ✓ Modularity and upgradable concept
- ✓ Up to 4 parallel fillings and more than 100 vehicles within 8 hours
- ✓ Low GWP cooling system
- ✓ Reliability proven by endurance tests
- ✓ Optimized TCO for 350 bar applications
- ✓ More than 100 patents



**ALL-IN-ONE**  
For light duty vehicles



**MODULAR**  
From light-duty  
to heavy-duty vehicles



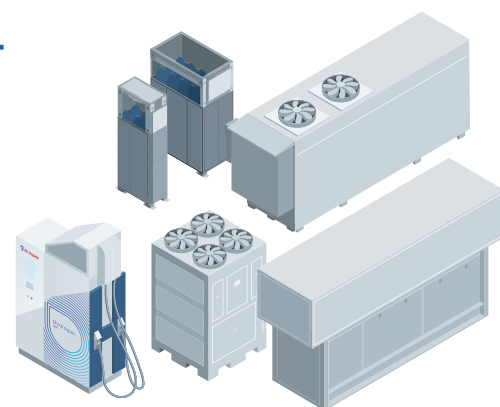
**MODULAR**  
For heavy-duty vehicles 350 bar  
For heavy-duty vehicles 700 & 350 bar

# Modular hydrogen refueling station

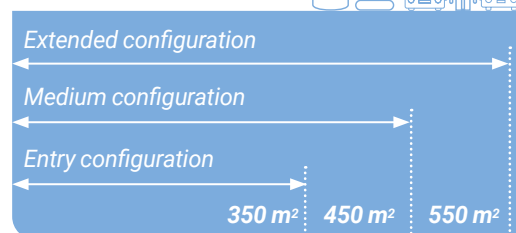
Gas-to-gas series | For heavy-duty vehicles 350 bar

## Performances

Source: trailers	Entry configuration	Medium configuration	Extended configuration
Dispenser(s)	1 x H35	2 x H35	4 x H35
Max. vehicles in 1 hour	6 vehicles (20 kg each)	12 vehicles (20 kg each)	24 vehicles (20 kg each)
Back-to-back performance	25 vehicles within 6 hours	50 vehicles within 6 hours	100 vehicles within 8 hours
24h capacity	1,000 kg/day	2,400 kg/day	3,600 kg/day



### Technical area\*



\* Source trailers and dispensers excluded.

## Technical specifications

<b>Fueling time</b>	<ul style="list-style-type: none"> <li>H35 - heavy-duty: 20 kg in 5 min 35 kg in 7 min</li> </ul>
<b>Minimum inlet pressure</b>	<ul style="list-style-type: none"> <li>Trailers: 50 bar</li> <li>Electrolyzers, pipeline: 30 bar</li> </ul>
<b>Noise</b>	< 85 dBA at 1 m
<b>Utilities</b>	<ul style="list-style-type: none"> <li>400 V, 3 phases, 50 Hz, 200 to 400 kVA</li> <li>Compressed air system included</li> <li>Nitrogen for maintenance purposes only</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>Hydrogen / flame detection</li> <li>Emergency stop buttons</li> <li>Flare adapted to urban use</li> </ul>
<b>Environment</b>	Ambient operating temperature: -20°C to +40°C
<b>Codes and standard</b>	<ul style="list-style-type: none"> <li>CE marking - EN17127 - EN17268</li> <li>ISO 19880-1 + SAT tests certified by 3<sup>rd</sup> party (CEP)</li> <li>IR communication: SAE TIR J2799</li> <li>Metrology : OIML R139 - Certification by 3<sup>rd</sup> party</li> </ul>

## Modularity

### Compatible hydrogen sources

- Gas trailer and ground storage - possible source in parallel
- Pipeline or electrolyzers

### Compression and storage

- Number of compressors and MP/HP 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

## Contacts

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