



The New H2Station®

Proven Technology

New Compressor Dedicated to
Hydrogen – Developed by Nel

Innovative Solutions



Compact, Flexible and Reliable

The H2Station represents the next generation in hydrogen fueling for fuel cell cars, buses, trucks and trains. It offers fast fueling with the world's most compact footprint. The design is based on years of R&D and operational experience, and is renowned for providing high fueling reliability. It features the world's first dedicated hydrogen compressor, the most efficient and contamination free hydrogen compressor on the market today.

H2Station Key Features

- Daily capacity of up to 2,500 kg/day
- Maximum capacity: 120 kg/h
- Hydrogen storage dimensioned to fit any preferred capacity and supply source ranging from on-site production to truck delivery
- Modular and flexible placement of H2Station modules at site
- Compact dispenser for easy integration at existing station
- Dispenser with new user interface to optimize customer experience
- Standard module developed through years of R&D
- Lean volume manufacturing capability of up to 300 stations/year
- Safe by design and functionally safety compliant with IEC 61511

H2Station Services

- One stop shop for all service related to H2Station
- Handling installation of H2Station from shipment to start of operation
- Full operation and maintenance for high reliability
- Spare parts for standard modules in stock
- 24/7 operation monitoring and technical hotline
- KPI monitoring with online client access
- Site risk assessment and site layout
- Site elements for easy and cost effective installation of modules

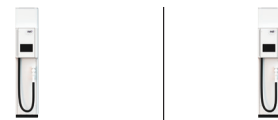
Specifications

Station Modules



Station Types	SM	HP Duplex	LP Duplex
Maximum Capacity	65 kg/h @ 70MPa	120 kg/h @ 70MPa	120 kg/h @ 35MPa
Dispenser Connections	2 (one of each below)	Up to 3 (from below)	Up to 3 (from below)
Dispenser Options	70MPa 35MPa	70MPa 35MPa	35MPa
Inlet Pressure Range	2-70MPa - Multiple hydrogen source		
Dimensions - Weight	3.3m L x 2.2m W x 3.6m H - 17.5 ton		
Approvals	CE marked or UL listed (comply to all modules)		
Design	Available in galvanized steel for resistance to corrosion		

Dispensers



Dispenser Types	70MPa	35MPa
Fueling Protocol	SAE J2601-1 v2016	SAE J2601-2 Optifill™
Nozzle Design	In accordance with SAE J2600 and SAE J2799 (IR)	
Metering	Coriolis mass flow meter	
Payment	Compatible with APP/POS/Credit Card via built-in communication protocols	
Dimensions	0.52m L x 0.52m W x 2.5m H (integration on existing gas-station)	
Placement	Up to 50m from Station Module	
Design	Available in galvanized steel or customer trade dress by quote	

Fueling Storage



Storage Pressure	Nominal 43-95MPa - Maximum 50-100MPa
Storage Capacity	Up to 106 kg of hydrogen in each rack
	Optional multiple racks - Upgradable after installation
Valves and Safety	Leak detection, jet fire protection, double block and bleed
Dimensions	3.4m L x 1.2m W x flexible H up to 2.8m
Placement	Up to 30m from Station Module
Design	Available in galvanized steel for resistance to corrosion

Supply Storage

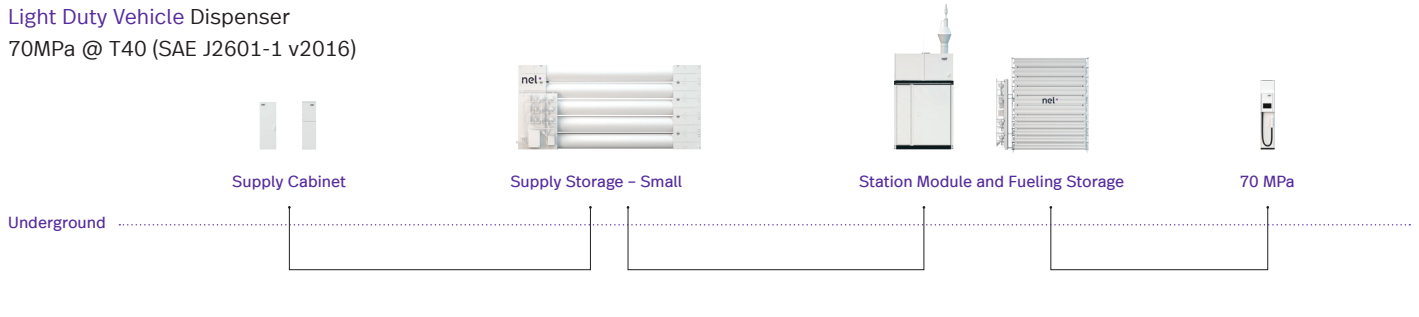


Storage Pressure	Nominal 20MPa - Maximum 24MPa
Storage Capacity	50-500 kg hydrogen in each rack
	Optional multiple racks - Upgradable after installation
Valves and Safety	Leak detection, jet fire protection, double block and bleed
Dimensions	6.5-12.3m L x 2.4m W x flexible H up to 3.0m
Placement	Up to 100m from Station Module
Option	Supply Cabinet for fast hydrogen unloading to Supply Storage
Design	Available in galvanized steel with white tubes

H2Station Solutions Configurations and Examples

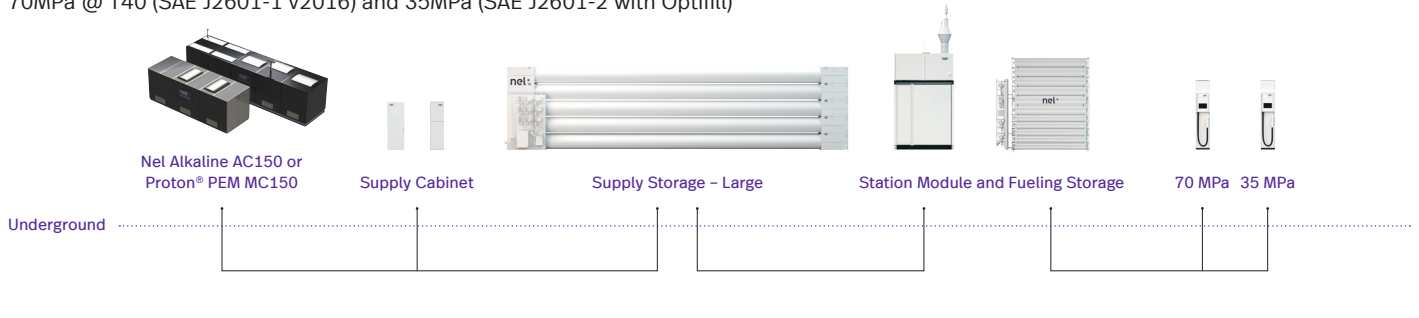
H2Station

Light Duty Vehicle Dispenser
70MPa @ T40 (SAE J2601-1 v2016)



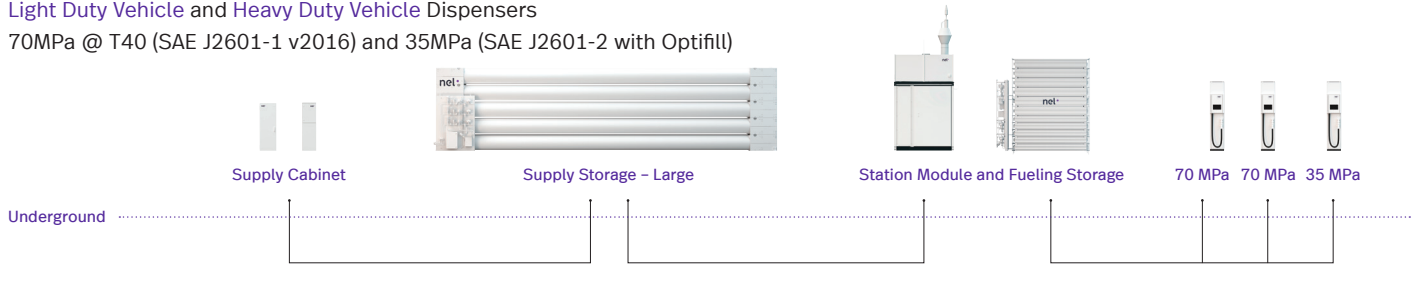
H2Station

Light Duty Vehicle and Heavy Duty Vehicle Dispensers
70MPa @ T40 (SAE J2601-1 v2016) and 35MPa (SAE J2601-2 with Optifill)



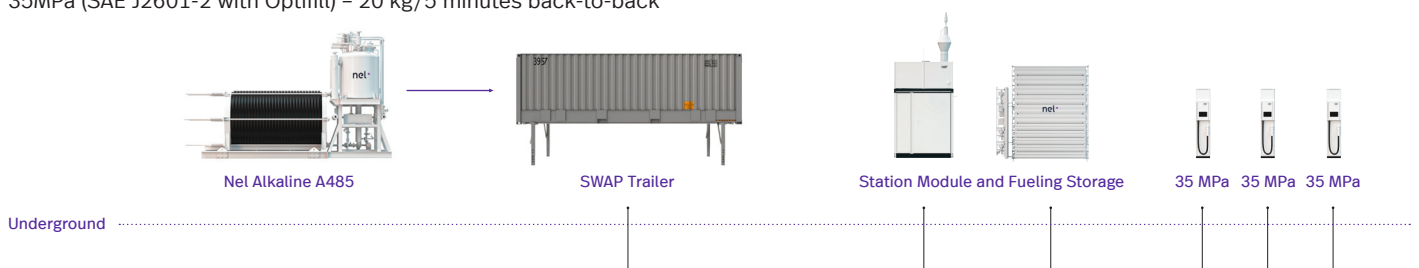
H2Station HP Duplex

Light Duty Vehicle and Heavy Duty Vehicle Dispensers
70MPa @ T40 (SAE J2601-1 v2016) and 35MPa (SAE J2601-2 with Optifill)



H2Station LP Duplex

Heavy Duty Vehicle Dispensers
35MPa (SAE J2601-2 with Optifill) - 20 kg/5 minutes back-to-back



Nel Hydrogen is a publicly listed hydrogen company which builds on more than 90 years of combined experience within hydrogen production and hydrogen fueling technology.

A Benchmark within Hydrogen Production and Fueling

With more than 3,500 electrolyzers delivered around the globe, Nel Hydrogen is the world's leading company for alkaline and proton exchange membrane (PEM) water electrolysis. Nel Hydrogen fueling stations have the highest reported availability in the world, and were the first to comply with the latest standards for refueling.

www.nelhydrogen.com