

Hydrogen Generators

for GC and GC/MS carrier gas applications



The Parker domnick hunter H-MD ultra high purity hydrogen gas generators offer the optimum combination of safe operation, reliability, performance and low cost of ownership.

Utilising field proven PEM cell technology, hydrogen is produced on demand from deionised water and electricity, at low pressure and with minimal stored volume. Innovative control software allows unrivalled operational safety and reliability.

The H-MD generators ideally supply GC and GC/MS carrier gas, in addition to all known combustion detectors that are routinely used in today's laboratory workflows. Four models operate at flow rates; 160 ml/min, 250 ml/min, 500 ml/min and 1100 ml/min.

Hydrogen generators are available with Remote Networking software. RemoteNet allows up to 27 hydrogen generators to be actively controlled from one central PC, and facilitates true cascading capabilities.



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Product Features:

- **Eliminate dangerous hydrogen cylinders from the work place**
- **Simple to install and operate**
- **Compact, reliable with minimal maintenance**
- **Produces a continuous supply of 99.99995% pure hydrogen up to 1,100ml/min and 6.9 bar**
- **2 year standard cell warranty**
- **Optional automatic water fill and remote networking capability**

Product Selection

| Model | Flow Rate | Purity* | Water Consumption (24/7, full flow) | Delivery Pressure | | Optional Auto Water Fill (AWF) |
|---------|-----------|-----------|--|-------------------|--------|-----------------------------------|
| | ml/min | % | L/week | bar g | psi g | |
| 20H-MD | 160 | >99.99995 | 1.69 | 0.69-6.89 | 10-100 | YES |
| 40H-MD | 250 | >99.99995 | 2.41 | 0.69-6.89 | 10-100 | YES |
| 60H-MD | 500 | >99.99995 | 4.82 | 0.69-6.89 | 10-100 | YES |
| 110H-MD | 1100 | >99.99995 | 10.60 | 0.69-6.89 | 10-100 | Standard |

*With respect to oxygen

Note: For auto water fill option add suffix AWF ie 20H-MD-AWF

Technical Data

| | |
|---------------------------|---|
| Ambient Temperature Range | 5 - 40°C 41 - 104°F |
| Water Supply Pressure* | 0.1 bar g 1.45 psi g |
| Water Supply Flow Rate* | 1 L/min |
| Water Quality | Deionised. ASTM II, >1MΩ, <1µs, filtered to <100µm |
| Supply Voltage Range | 90V - 264V 50/60Hz |
| Port Connections | Hydrogen Outlet Water Drain Water Fill* |
| | ¹ / ₈ " Compression Fitting Quick Release Push in Fitting Quick Release Push in Fitting |

*With optional AWF

Weights and Dimensions

| Model | Height (H) | | Width (W) | | Depth (D) | | Weight (Empty) | | Weight (Full of Water) | |
|---------|------------|------|-----------|------|-----------|------|----------------|------|------------------------|------|
| | mm | in | mm | in | mm | in | kg | lb | kg | lb |
| 20H-MD | 456 | 17.9 | 342 | 13.5 | 470 | 18.5 | 20.5 | 45.2 | 25 | 55.1 |
| 40H-MD | 456 | 17.9 | 342 | 13.5 | 470 | 18.5 | 20.5 | 45.2 | 25 | 55.1 |
| 60H-MD | 456 | 17.9 | 342 | 13.5 | 470 | 18.5 | 20.5 | 45.2 | 25 | 55.1 |
| 110H-MD | 456 | 17.9 | 342 | 13.5 | 470 | 18.5 | 23.6 | 51.8 | 28 | 61.7 |

Preventative Maintenance

| Preventative Maintenance Kit | Part Number | Change Frequency |
|------------------------------|-------------|------------------|
| 6 Month Kit | 604971500 | 6 Months |
| 24 Month Kit | 604970720 | 24 Months |

Optional Extra's

| Description | Part Number | Required for |
|---------------------------|-------------|--|
| RemoteNet user software | 604971510 | up to two generators |
| RemoteNet user add on kit | 604971520 | each additional generator (604971510 required) |