# GateKeeper® GPU WY Media Gas Purifiers

*Superior purity control*



Entegris' GateKeeper® GPU gas purifiers were designed to improve purity consistency, lifetime, and final purity in microelectronics applications where high-purity gas is critical. Leveraging our expertise in material science, we have developed a new generation of WY gas purification products that deliver unsurpassed value and performance.

## APPLICATIONS

- Semiconductor
- Data storage
- Flat panel display
- LED
- Solar

## FEATURES & BENEFITS

| | |
|---|---|
| **Process control and protection** | Purity control below part-per-billion (ppb) levels |
| | Low pressure drop through the purifier |
| | CE certified to the Pressure Equipment Directive (PED) |
| | Manufactured in an ISO® 9001:2015 facility |
| **Cost effective** | Regenerable – eliminates disposal issues and costs |
| | Long lifetime — improves cost of ownership |
| **Safe and simple to use** | Uses ambient temperature purification — no heat or power required to operate |
| | Insensitive to orientation (horizontal/vertical) |

## GENERAL SPECIFICATIONS

| | | |
|---|---|---|
| **Gases purified** | CDA, $O_2$, $N_2$, Ar, He, Kr, Ne, Xe, $H_2$, $D_2$, $N_2O$, NO, $CF_4$ | |
| **Impurities removed** | **CONTAMINANTS** | **OUTLET PURITY** |
| | Moisture, $H_2O$ | <100 pptV |
| | Carbon dioxide, $CO_2$ | <100 pptV |
| | Volatile Acids | <1 pptV |
| | Volatile Bases | <5 pptV |
| | Organic compounds, $C^5$ and above* | <1 pptV |
| | Refractory Compounds | <1 pptV |
| | Metals | <1 ppbV |
| **Outlet particle filter** | Wafergard® — 316 stainless steel membrane, 20 µm or 0.0015 µm | |
| **Lifetime** | One year with 1 ppm inlet challenge of moisture with flow rates shown on the next page.<br>The lifetime varies with the inlet impurities and flow rate. Contact Entegris for application specific lifetime calculations. | |
| **Regenerable** | Yes | |
| **Dangerous goods (DG)** | No | |
| **Operating temperature** | 0° – 65°C (32° – 149°F) | |
| **Leak rating** | $1 \times 10^{-9}$ atm cc/sec of He | |
| **Materials of construction** | Housing: 316L stainless steel | |
| **Certification** | CE certified to the Pressure Equipment Directive (PED)<br>Designed in accordance with ASME® | |

**Organic performance applies to organic compounds with five or more carbon atoms, $C_5$+, under the specified operating conditions. Performance for lighter hydrocarbons in compound is application dependent. Contact Entegris for application specific performance information.*

## OPERATING SPECIFICATIONS

| Model | Maximum flow rate | Lifetime is 1 year at this flow rate, with 1 ppm moisture | Maximum operating pressure – purifier only | Maximum operating pressure – purifier with options | Pressure drop, with 20 µm particle filter* | Pressure drop, with 0.0015 µm particle filter* |
|---|---|---|---|---|---|---|
| GPU 35 | 1 slpm | 1.0 slpm | 1,400 psig | 250 psig | – | 0.3 psid |
| GPU 70 | 5 slpm | 3.0 slpm | 1,400 psig | 250 psig | – | 0.5 psid |
| GPU 80 | 10 slpm | 4.0 slpm | 1,400 psig | 250 psig | – | 1.0 psid |
| GPU 100 | 20 slpm | 1.0 slpm | 1,000 psig | 250 psig | – | 16.7 psid |
| GPU 200 | 20 slpm | 12.0 slpm | 800 psig | 250 psig | – | 0.7 psid |
| GPU 300 | 50 slpm | 17.0 slpm | 800 psig | 250 psig | – | 1.3 psid |
| GPU 500 | 75 slpm | 35.0 slpm | 600 psig | 250 psig | – | 1.3 psid |
| GPU 700 | 120 slpm | 45.0 slpm | 600 psig | 250 psig | – | 1.8 psid |
| GPU 2500 4R | 300 slpm | 175.0 slpm | 505 psig | 250 psig | – | 5.0 psid |
| GPU 2500 8R | 500 slpm | 175.0 slpm | 505 psig | 250 psig | – | 5.6 psid |
| GPU 3000 | 500 slpm | 225.0 slpm | 505 psig | 250 psig | – | 5.6 psid |
| GPU 5000 | 500 slpm | 300.0 slpm | 505 psig | 250 psig | – | 7.0 psid |
| GPU 10M 8R | 1,000 slpm | 600.0 slpm | 370 psig | 250 psig | – | 5.6 psid |
| GPU 10M 12R | 1,000 slpm | 600.0 slpm | 370 psig | 250 psig | – | 8.0 psid |
| GPU 13M 12R | 2,000 slpm | 800.0 slpm | 370 psig | 250 psig | 2.0 psid | – |
| GPU 13M 16R | 2,500 slpm | 800.0 slpm | 370 psig | 250 psig | 3.0 psid | – |
| GPU 17M 12R | 2,000 slpm | 900.0 slpm | 370 psig | 250 psig | 2.0 psid | – |
| GPU 17M 16R | 2,500 slpm | 900.0 slpm | 370 psig | 250 psig | 3.0 psid | – |
| GPU 20M 12R | 2,000 slpm | 1,200.0 slpm | 370 psig | 250 psig | – | 19.0 psid |
| GPU 20M 16R | 2,500 slpm | 1,200.0 slpm | 370 psig | 250 psig | – | 19.0 psid |

**Purifier only at maximum flow rating with 90 psig inlet pressure*

## FACILITY SPECIFICATIONS

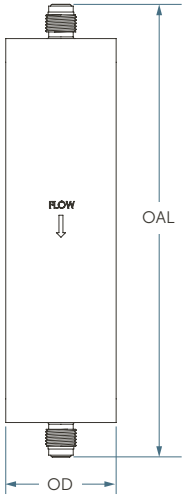
| GPU model | Connection size (VCR) | Inlet/outlet connection type (VCR) | Outside Diameter (OD) | Overall length (OAL) | Approximate weight |
|---|---|---|---|---|---|
| GPU 35 | ¼" | Male/male | 38.1 mm (1.5") | 84 mm (3.3") | 0.3 kg (0.7 lbs) |
| GPU 70 | ¼" | Male/male | 38.1 mm (1.5") | 114 mm (4.5") | 0.3 kg (0.7 lbs) |
| GPU 80 | ¼" | Male/male | 38.1 mm (1.5") | 127 mm (5.0") | 0.3 kg (0.7 lbs) |
| GPU 100 | ¼" | Male/male | N/A | 84 mm (3.3") | 0.9 kg (2.0 lbs) |
| GPU 200 | ¼" | Male/male | 50.8 mm (2.0") | 157 mm (6.2") | 0.9 kg (2.0 lbs) |
| GPU 300 | ¼" | Male/male | 50.8 mm (2.0") | 208 mm (8.2") | 1.1 kg (2.5 lbs) |
| GPU 500 | ¼" | Male/male | 76.2 mm (3.0") | 201 mm (7.9") | 1.8 kg (4.0 lbs) |
| GPU 700 | ¼" | Male/male | 76.2 mm (3.0") | 254 mm (10.0") | 2.5 kg (5.5 lbs) |
| GPU 2500 4R | ¼" | Male/male | 101.6 mm (4.0") | 439 mm (17.3") | 6.8 kg (15 lbs) |
| GPU 2500 8R | ½" | Male/male | 101.6 mm (4.0") | 445 mm (17.5") | 6.8 kg (15 lbs) |
| GPU 3000 | ½" | Male/male | 101.6 mm (4.0") | 508 mm (20.0") | 7.3 kg (16 lbs) |
| GPU 5000 | ½" | Male/male | 101.6 mm (4.0") | 785 mm (30.9") | 10.0 kg (22 lbs) |
| GPU 10M 8R | ½" | Male/male | 152.4 mm (6.0") | 737 mm (29.0") | 20 kg (44 lbs) |
| GPU 10M 12R | ¾" | Male/male | 152.4 mm (6.0") | 749 mm (29.5") | 21.8 kg (48 lbs) |
| GPU 13M 12R | ¾" | Male/male | 152.4 mm (6.0") | 892 mm (35.1") | 24.9 kg (55 lbs) |
| GPU 13M 16R | 1" | Male/male | 152.4 mm (6.0") | 899 mm (35.4") | 24.9 kg (55 lbs) |
| GPU 17M 12R | ¾" | Male/male | 152.4 mm (6.0") | 1085 mm (42.7") | 29.5 kg (65 lbs) |
| GPU 17M 16R | 1" | Male/male | 152.4 mm (6.0") | 1090 mm (42.9") | 29.5 kg (65 lbs) |
| GPU 20M 12R | ¾" | Male/male | 152.4 mm (6.0") | 1290 mm (50.8") | 34 kg (75 lbs) |
| GPU 20M 16R | 1" | Male/male | 152.4 mm (6.0") | 1296 mm (51.0") | 34 kg (75 lbs) |

## FACILITY SPECIFICATIONS, PURIFIERS WITH ISOLATION VALVES

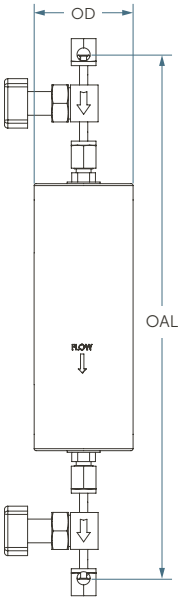
| GPU model | Connection size (VCR) | Inlet/outlet connection type (VCR) | Outside Diameter (OD) | Overall length (OAL) with valves | Approximate weight with valves |
|---|---|---|---|---|---|
| GPU 35 | ¼" | Female/female | 38.1 mm (1.5") | 234 mm (9.2") | 1.2 kg (2.6 lbs) |
| GPU 70 | ¼" | Female/female | 38.1 mm (1.5") | 264 mm (10.4") | 1.3 kg (2.9 lbs) |
| GPU 80 | ¼" | Female/female | 38.1 mm (1.5") | 277 mm (10.9") | 1.3 kg (2.9 lbs) |
| GPU 100 | ¼" | Female/female | N/A | 234 mm (9.2") | 1.3 kg (2.9 lbs) |
| GPU 200 | ¼" | Female/female | 50.8 mm (2.0") | 307 mm (12.1") | 1.7 kg (3.7 lbs) |
| GPU 300 | ¼" | Female/female | 50.8 mm (2.0") | 358 mm (14.1") | 1.8 kg (3.8 lbs) |
| GPU 300 (GC 300) | ¼" | Female/male | 83.8 mm (3.3") | 401.3 mm (15.8") | 2.3 kg (5.1 lbs) |
| GPU 500 | ¼" | Female/female | 76.2 mm (3.0") | 351 mm (13.8") | 2.7 kg (6.0 lbs) |
| GPU 700 | ¼" | Female/female | 76.2 mm (3.0") | 404 mm (15.9") | 4.4 kg (9.6 lbs) |
| GPU 2500 4R | ¼" | Female/female | 101.6 mm (4.0") | 592 mm (23.3") | 6.8 kg (15 lbs) |
| GPU 2500 8R | ½" | Female/female | 101.6 mm (4.0") | 714 mm (28.1") | 8.0 kg (17.7 lbs) |
| GPU 3000 | ½" | Female/female | 101.6 mm (4.0") | 777 mm (30.6") | 8.5 kg (18.7 lbs) |
| GPU 5000 | ½" | Female/female | 101.6 mm (4.0") | 1054 mm (41.5") | 12.5 kg (27.6 lbs) |
| GPU 10M 8R | ½" | Female/male | 152.4 mm (6.0") | 970 mm (38.2") | 22.5 kg (49.6 lbs) |
| GPU 10M 12R | ¾" | Female/female | 152.4 mm (6.0") | 1125 mm (44.3") | 24.9 kg (55.0 lbs) |
| GPU 13M 12R | ¾" | Female/female | 152.4 mm (6.0") | 1270 mm (50.0") | 28.1 kg (62.0 lbs) |
| GPU 13M 16R | 1" | Female/female | 152.4 mm (6.0") | 1308 mm (51.5") | 29.5 kg (65.0 lbs) |
| GPU 17M 12R | ¾" | Female/female | 152.4 mm (6.0") | 1461 mm (57.5") | 32.7 kg (72.0 lbs) |
| GPU 17M 16R | 1" | Female/female | 152.4 mm (6.0") | 1499 mm (59.0") | 34.0 kg (75.0 lbs) |
| GPU 20M 12R | ¾" | Female/female | 152.4 mm (6.0") | 1666 mm (65.6") | 37.2 kg (82.0 lbs) |
| GPU 20M 16R | 1" | Female/female | 152.4 mm (6.0") | 1705 mm (67.1") | 38.6 kg (85.0 lbs) |

## DIMENSIONS

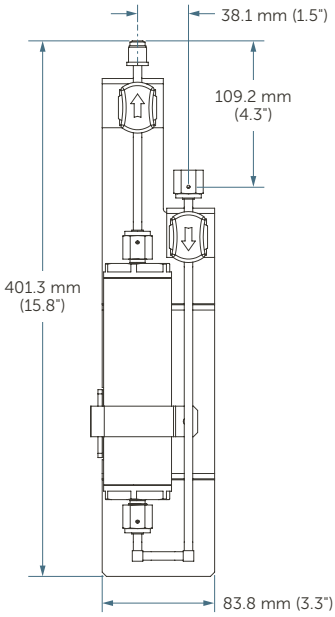
Purifier Only



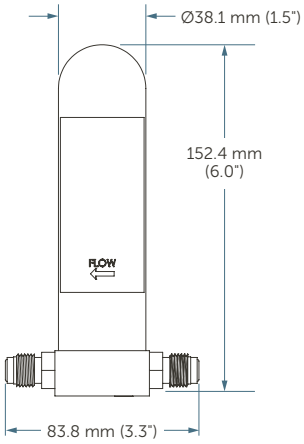

Purifier with Isolation Valves




GPU 300 with GC 300 Manifold




GPU 100



## ORDERING INFORMATION

GateKeeper GPU WY Media Gas Purifiers: part number

GPU S ___ __ WY __ R __ C __

**Designator**
A = New/standard
R = Regenerated model

**Region**
C = CE/PED

**Options**
00 = None
02 = Isolation valves
07 = GC300 (only for GPU300)

**Configuration**
R = Male-to-male (does not include valves)

**Fitting size**
04 = ¼"
08 = ½"
12 = ¾"
16 = 1"

**Media**
WY

**Outlet filter**
F = 0.0015 µm stainless steel
S = 20 µm stainless steel*

**Only available in 13M, 17M, 20M, and selected models*

**Model**

| | |
|---|---|
| 35 | 2500 |
| 70 | 3000 |
| 80 | 5000 |
| 100 | 10M |
| 200 | 13M |
| 300 | 17M |
| 500 | 20M |
| 700 | |

**Housing material**
S = 316 stainless steel

## REGENERATON

REGEN, REDUCE, REUSE

Contact your local regeneration center:

## ADDITIONAL OPTIONS

**BYPASS ASSEMBLIES:** This assembly contains additional valves and piping so the process gas can bypass around the purifier. Entegris offers 3 and 5 valve bypass assemblies for many of our standard GPU Gas Purifiers (sold separately).

**BREAK THRU INDICATOR (BTI):** Detects moisture downstream of a purifier and notifies the customer that a replacement or regeneration is required.

### FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the Contact Us link to find the customer service center nearest you.

### TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit entegris.com and select the Terms & Conditions link in the footer.

Entegris

Corporate Headquarters
129 Concord Road
Billerica, MA 01821
USA

Customer Service
Tel +1 952 556 4181
Fax +1 952 556 8022
Toll Free 800 394 4083

Entegris®, the Entegris Rings Design®, and other product names are trademarks of Entegris, Inc. as listed on entegris.com/trademarks. All third-party product names, logos, and company names are trademarks or registered trademarks of their respective owners. Use of them does not imply any affiliation, sponsorship, or endorsement by the trademark owner.

©2020-2026 Entegris, Inc. | All rights reserved. | Printed in the USA | 4521-10965ENT-1126