CREATE | VISUALIZE | INSPIRE

AMD

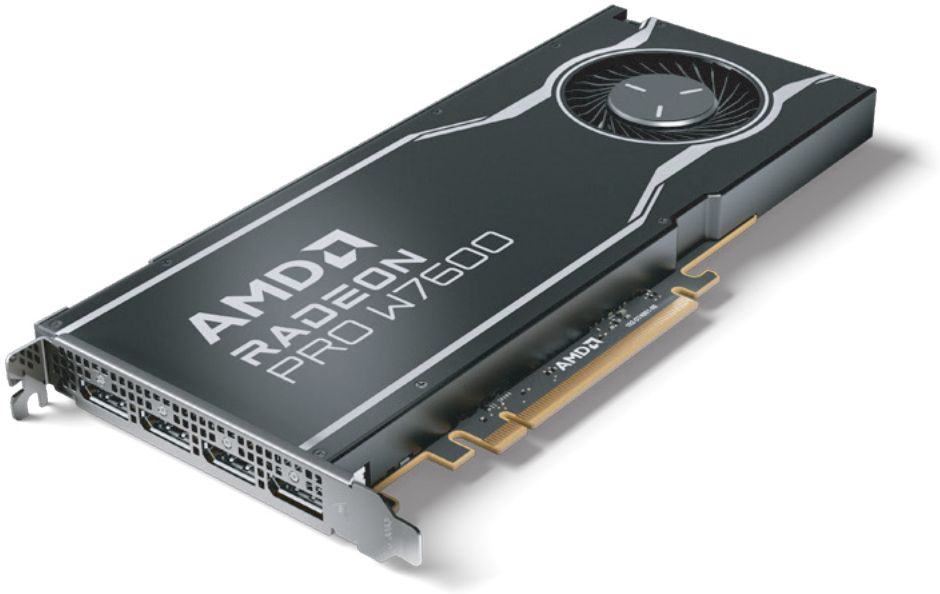
AMD RADEON™ PRO W7600

FOR MAINSTREAM WORKLOADS

GDDR6
8GB

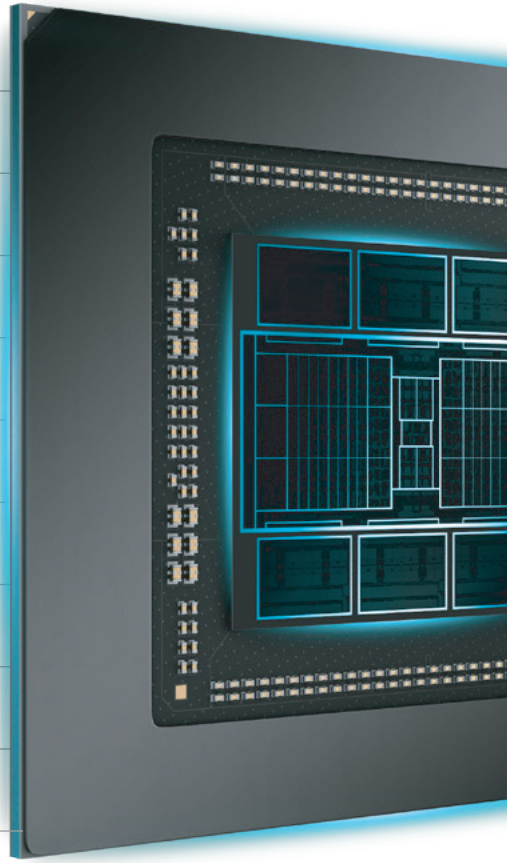
AMD
RDNA 3

AMD RADEON™ PRO W7600



KEY FEATURES

- 8GB GDDR6 Memory
- 2x AI Accelerators per Compute Unit
- 2nd Generation Ray Tracing
- HVEC / H265 Encode/Decode Support
- AV1 Encode (NEW) & Decode[3]
- **NEW** AI Enhanced Video Encode
- **NEW** AMD Radiance Display™ Engine
- DisplayPort™ 2.1 (UHBR 10) with up to 38.7 Gbit/s
- Up to 10K60 w/ DSC display support
- Support for next-gen displays
- 3D Stereo Support



50%

MORE RAY TRACING PERFORMANCE PER CU[1]

Higher Quality
Faster Rendering
Beautiful Results

1.5x

MAX TOTAL DATA RATE[2]

Industry-leading
Radiant colors
Huge displays

24/7

RELIABILITY

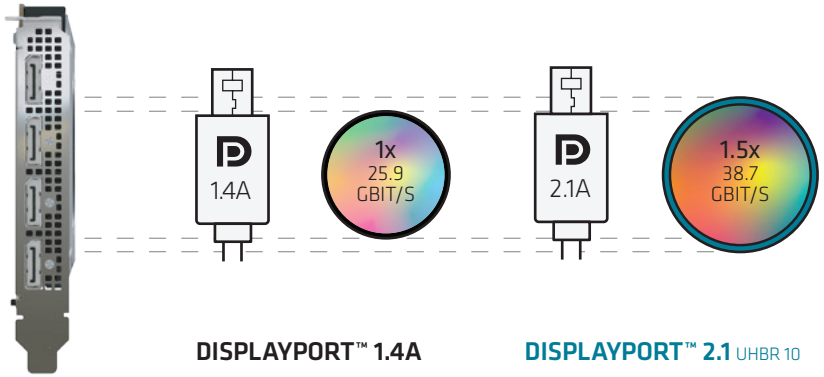
Built for demand
Certified performance
Efficient multitasking

AMD RADEON PRO W7600

AMD RADEON™ PRO W7600

AMD **RADIANCE DISPLAY**™ ENGINE

First Workstation Graphics with DisplayPort™ 2.1



	DISPLAYPORT™ 1.4A	**DISPLAYPORT™ 2.1** UHBR 10
HIGH FRAME RATE	8K60 W/ DSC	8K120 W/ DSC
ACCURATE COLOR	6K60 COMPRESSED	6K60 UNCOMPRESSED
LARGER RESOLUTIONS	8K60 W/ DSC	10K60 W/ DSC

TECHNICAL SPECIFICATIONS

GPU Architecture
AMD RDNA™ 3

Hardware Raytracing
Yes

Lithography
TSMC 6NM

Ray Accelerators
32

ROPs
64

Stream Processors
2048

Compute Units
32

Shaders
64

Peak Half Precision (FP16) Performance
39.98 TFLOPS

Peak Single Precision (FP32) Performance
19.99 TFLOPS

Peak Double Precision (FP64) Performance
.62 TFLOPS

Transistor Count
13.3 Billion

Total Board Power (TBP)
130 W

PSU Recommendation
350 W

Dedicated Memory Size
8 GB

Memory Data Rate
18 Gbps

Dedicated Memory Type
GDDR6

AMD Infinity Cache™
Yes, 32 MB

Memory Interface
128-bit

Peak Memory Bandwidth
up to 288 GB/s

Memory ECC Support
No

4K H264 Encode | Decode
Yes | Yes

H265/HEVC Encode | Decode
Yes | Yes

AV1 Encode | Decode
Yes | Yes

3D Stereo Support
Yes

Form Factor
PCIe® Add-in Card

Bus Type
PCIe 4.0 x8

Cooling
Active

Displays Type(s)
4x DisplayPort™ 2.1

Display Configurations
4x @ 3840x2160px (4K)
4x @ 5120x2880px (5K)
2x @ 7680x4320px (8K)

HDR Support
Yes

8K Support
Yes

16KSupport
No

Board Height
Full Height

Board Length
9.5" (241 mm)

Board Width
Single Slot

Supported Technologies
AMD Remote[4] Workstation
AMD Radeon™ Media Engine
AMD Software: PRO Edition
AMD Radeon™ VR Ready Creator
AMD EyefinityTechnology[5] (Professionals)
AMD Radeon™ ProRender

Software API Support
DirectX 12 Ultimate
OpenGL 4.6
Vulkan 1.3.2xx
Open CL 2.0

Product Family
AMD Radeon™ PRO

Product Line
AMD Radeon™ PRO W7000 Series

Platform
Desktop Workstation

Supported Operating Systems
Windows 11 - 64-Bit Edition
Windows 10 - 64-Bit Edition
Linux x86_64

External Power Connectors
1x6-Pin Power Connectors

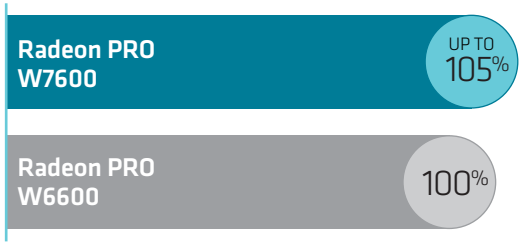
AMD RADEON PRO W7600

AMD RADEON™ PRO W7600

PERFORMANCE

Generational Performance

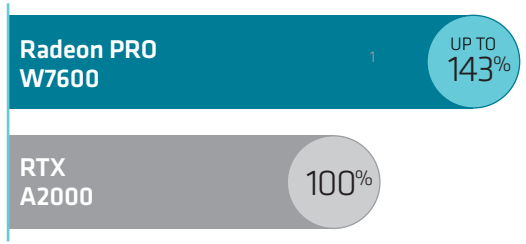
SPECviewperf® 2020, Relative to the Radeon™ PRO W6600. Higher is Better.



RPW-431: Testing as of June 28, 2023, by AMD Performance Labs on a test system comprised of an AMD Ryzen Threadripper PRO 5945WX, 64GB DDR4-2133Mhz RAM, Windows® 11 Pro build 22621, 64-bit, AMD Software: PRO Edition 23.10 RCP17 with AMD Radeon™ PRO W7600, W7500 vs. AMD Software: PRO Edition 23.Q1 with AMD Radeon™ PRO W6600 at 3840x2160 display resolution. Benchmark Application: SPECviewperf 2020 V3.1 (Geomean across 3dsmax-07, catia-6, creo-03, energy-03, maya-06, medical-03, snx-04, solidworks-07.) Additional information about the SPEC benchmarks can be found at www.spec.org/gwpg. SPEC® and SPECviewperf® are registered trademarks of the Standard Performance Evaluation Corporation. Results may vary. RPW-431

SOLIDWORKS

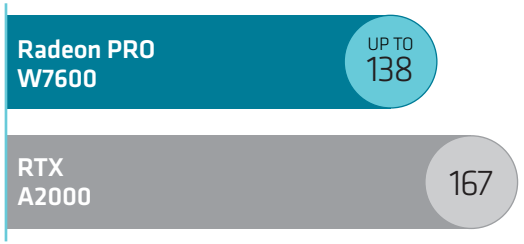
4K GPU Composite Score. Relative to the RTX A2000. Higher is Better.



RPW-436: Testing as of June 28, 2023, by AMD Performance Labs on a test system comprised of an AMD Ryzen Threadripper PRO 5945WX, 64GB RAM, Windows® 11 Pro build 22621, 64-bit, AMD Radeon™ PRO Software 23.10 RCP17 with AMD Radeon™ PRO W7600, W7500, and vs. similarly configured system with Nvidia Driver 528.95 with Nvidia T1000, RTX A2000 at 3840x2160 display resolution. Benchmark Application: SPECapc® SOLIDWORKS 2022 (4K). Additional information about the SPEC benchmarks can be found at www.spec.org/gwpg. SPEC® and SPECviewperf® are registered trademarks of the Standard Performance Evaluation Corporation. Results may vary. RPW-436

Twinmotion

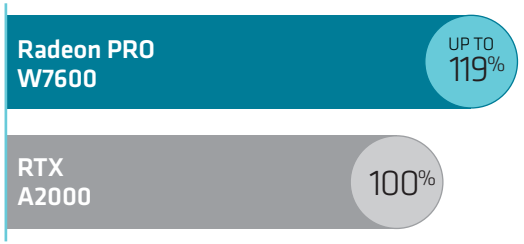
Relative to the RTX A2000. Lower is Better.



RPW-438: Testing as of June 28, 2023, by AMD Performance Labs on a test system comprised of an AMD Ryzen Threadripper PRO 5975WX, 64GB DDR4 3600MHzz RAM, Windows® 11 Pro build 22621, 64-bit, AMD Radeon™ PRO Software 23.10 n33-230502a-391494e with AMD Radeon™ PRO W7600, W7500, and vs. similarly configured system with Nvidia Driver 528.95 with Nvidia T1000, RTX A2000 at 3840x2160 display resolution. Benchmark Application: Epic Games Twinmotion - GPU Rendering Times. Results may vary. RPW-438

Blackmagic DaVinci Resolve

4K Media Score, Higher is Better.



RPW-441: Testing as of June 28, 2023 by AMD Performance Labs on a test system comprised of an AMD Ryzen Threadripper PRO 5945WX, 64GBRAM, Windows® 11 Pro build 22621, 64-bit, AMD Radeon™ PRO Software 23.10 RCP17 with AMD Radeon™ PRO W7600, W7500, and vs. similarly configured system with Nvidia Driver 528.95 with Nvidia T1000, RTX A2000 at 3840x2160 display resolution.Benchmark Application: PugetBench for After Effects - GPU Score. Results may vary. RPW-441

1 PW-428: 50% more RAYTRACING performance per CU Based on November 2022 AMD internal performance lab measurement of rays with indirect calls on W7900 GPU vs. W6800 GPU. RPW-428

2 RPW-434: The AMD Radeon™ PRO W7600 graphics card has DisplayPort™ 2.1 with up to 9.675 Gbit/s per lane is 1.5x higher bandwidth vs. DisplayPort 1.4a with up to 8.1 Gbit/s per lane on the AMD Radeon™ PRO W6600. RPW-434

3 GD-176: Video codec acceleration (including at least the HEVC (H.265), H.264, VP9, and AV1 codecs) is subject to and not operable without inclusion/installation of compatible media players. GD-176

4 Learn more at www.amd.com/en/technologies/remote-workstation

5 Learn more at www.amd.com/en/technologies/eyefinity-professionals

The information contained herein is for informational purposes only and is subject to change without notice. While every precaution has been taken in the preparation of this document, it may contain technical inaccuracies, omissions, and typographical errors, and AMD is under no obligation to update or otherwise correct this information.Advanced Micro Devices, Inc. makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, and assumes no liability of any kind, including the implied warranties of noninfringement, merchantability or fitness for particular purposes, with respect to the operation or use of AMD hardware, software or other products described herein. No license, including implied or arising by estoppel, to any intellectual property rights is granted by this document. Terms and limitations applicable to the purchase or use of AMD's products are as set forth in a signed agreement between the parties or in AMD's Standard Terms and Conditions of Sale. GD-18

© 2023 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, AMD RDNA, Radeon, Ryzen, Threadripper, and combinations thereof are trademarks of Advanced Micro Devices, Inc. SPEC®, SPECviewperf®, and SPECapc® are trademarks or registered trademarks of Standard Performance Evaluation Corporation (SPEC). Learn more at www.spec.org. only and may be trademarks of their respective owners.

PID# 232194299

AMD RADEON PRO W7600