XGY SI Workstation pocket

Compact Arm-based AI device with 46 / 166 TOPS INT8 options

At a Glance

XGY SI Workstation pocket combines four Arm Cortex-A76 cores and four Cortex-A55 cores with a dedicated AI compute card for local edge workloads.

Standard and Max accelerator options are rated at 46 TOPS and 166 TOPS INT8. Memory options are 16 GB or 32 GB, with 256 GB storage and expansion up to 2 TB.

Wi-Fi 6, Bluetooth 5.0, five microphones and hardware video processing support voice and multimedia application development in a compact enclosure.



Key Features

- **AI compute options**
  46 TOPS INT8 standard compute card; 166 TOPS INT8 Max option.
- **Eight-core Arm CPU**
  4 Cortex-A76 cores and 4 Cortex-A55 cores.
- **Memory and storage**
  16 / 32 GB memory; 256 GB storage with expansion up to 2 TB.
- **Multimedia processing**
  Hardware video decoding and encoding capabilities up to 8K.
- **Wireless and audio**
  Wi-Fi 6, Bluetooth 5.0 and five microphones.
- **Software platform options**
  Android, Linux, Ubuntu and Debian options; compatibility depends on configuration.

Design and Application



Illustrative desktop workflow with a laptop, compact AI device and phone.



Enclosure and I/O

Metal finish, ventilation and connector openings.



Layered Design Concept

Illustrative view of the enclosure, cooling assembly and electronics.

Technical Specifications

Specification	Value
CPU	4 x Arm Cortex-A76 + 4 x Arm Cortex-A55.
AI compute card	Standard: 46 TOPS INT8. Max option: 166 TOPS INT8.
Memory options	16 GB / 32 GB.
Storage	256 GB; expansion supported up to 2 TB.
Microphones	5 microphones.
Video decode	8K at 60 fps: H.265 / VP9; 8K at 30 fps: H.264; 4K at 60 fps: AV1.
Video encode	8K at 30 fps: H.265 / H.264.
Operating systems	Android, Linux, Ubuntu and Debian platform options. OS image and driver compatibility depend on the selected configuration.
Wireless	Wi-Fi 6; Bluetooth 5.0.
Physical footprint	142 x 80 mm. Overall height is confirmed with the selected configuration.

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