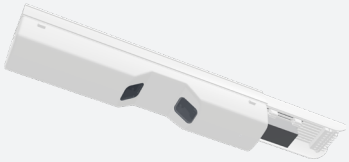
FAYTECH® AI CAMERA RAIL 4.0 DEEPX AI MODULE

FTAICR - DeepX AI Module
3030528212





Preliminary Datasheet
2026.11.06

SCAN ME

Pictures show sample configurations, real product may vary.

AI ACCELERATOR

Module	DEEPX DX-M1M AI accelerator
AI Performance	25 TOPS (INT8)*
Memory	LPDDR4x on module*
Form Factor	M.2 2242 (22 × 42 mm), B+M key
Host Interface	PCIe Gen3 x2 (Gen1-3, x1/x2)*
Typical Power	approx. 3 W*
Cooling	Passive

SOFTWARE

SDK	DEEPX DXNN SDK
Model Import	ONNX, compiled to .dxnn
Frameworks	PyTorch, TensorFlow, Keras, Ultralytics*
In the Camera Rail	Detected by the rail software
On-board NPU (A311D)	5 TOPS, used in addition
faytech Vision	Item recognition / tracking, per project

COMPATIBILITY

Shelf Module 4.0	3030524511 (A311D)
Aisle Module 4.0	3030524512 (A311D)
Slot	M.2 AI slot, PCIe x1 (A311D)
Genio 720 Versions	Carrier board 4.1 required

ENVIRONMENTAL CONDITIONS

Operation Temperature	-10°C to 50°C (in the rail)
Module Rating	-40°C to 85°C*
Usage	Indoor only

CERTIFICATIONS

Certification	Manufacturer documents on request

MECHANICAL

Dimensions [mm]	22 × 42 (M.2 2242)
Mounting	M.2 socket, 1 screw
Installation	Plug-in, no re-installation of the rail

faytech Tech Co., Ltd. | Fl. 2, Bldg. 8, Winlead Intelligent Park | Shenzhen, China
www.faytech.com +86 755 89580612 sales@faytech.com
061126 | ds_2026_FTAICR_DeepX_EN | specification is subject to change

ORDERING

Order	As option with a camera module or as upgrade
Camera Modules	3030524511 (Shelf), 3030524512 (Aisle)

INTENDED USE/APPLICATION

The DeepX AI module is the upgrade path of the AI Camera Rail 4.0. Plugged into the M.2 AI slot of a Shelf or Aisle Module, it adds 25 TOPS (INT8) to the 5 TOPS NPU on board - for more models at the same time and real-time analysis, without replacing or re-installing the rail. Models are compiled with the DEEPX DXNN SDK; faytech Vision item recognition and tracking can be trained per project.
* Manufacturer data (DEEPX). In the AI Camera Rail the module runs on PCIe x1 (A311D).
The device is designed for indoor use only. Devices operated or stored outside the specified temperature ranges are not covered by warranty.

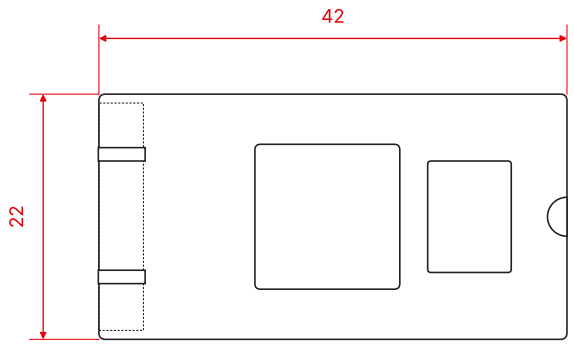
POWER

Supply	Via the M.2 slot of the camera module
Typical Power	approx. 3 W*

WEIGHT & PACKAGING

Net Weight	On request
Gross Weight (incl. Cartonage)	On request
Packaging Material	ESD bag in carton
Packaging Size L × W × H [mm]	On request

DIMENSIONS



Top view

Form factor	M.2 2242 (22 × 42 mm)
Key	B+M
Host interface	PCIe Gen3 ×2 (Gen1–3, x1/x2)
In AI Camera Rail	PCIe x1 via M.2 AI slot
AI performance	25 TOPS INT8*
Power	approx. 3 W typical*

* manufacturer data (DEEPX)

M.2 2242, B+M key · edge connector (left) plugs into the M.2 AI slot of the camera module, fixed with one screw (right). All dimensions in mm.

UPDATE NOTES:

Version:	Changes:
v1	First version (preliminary)

faytech Tech Co., Ltd. | Fl. 2, Bldg. 8, Winlead Intelligent Park | Shenzhen, China
www.faytech.com +86 755 89580612 sales@faytech.com
061126 | ds_2026_FTAICR_DeepX_EN | specification is subject to change