

Brain-Box M

SPECTRO 

Industrial Edge AI Expansion Module



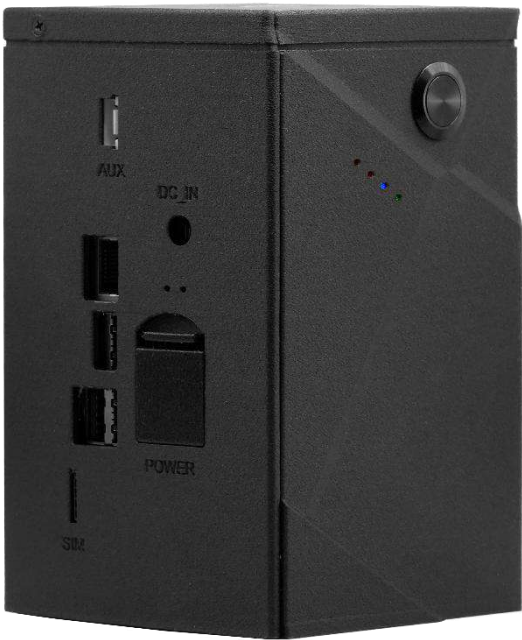
Brain-Box M – Technical Specifications

General Information

Specification	Value
Product name	Brain-Box M
Product Category	Edge AI Processing
Primary Application	AI Processing & Autonomous Inspection Control
Installation Type	Freestanding unit
Operating Architecture	Fully Edge-Based Processing

Electrical Specifications

Specification	Value
External Power Adapter	230V AC to 19V DC adapter included
Adapter Input Voltage	230V AC (50/60 Hz)
Adapter Output Voltage	19V DC
Adapter Power Rating	45W
Brain-Box Input Voltage	19V DC
Power Management	Supported
UPS Backup	Up to approx. 3 hours (depending on system load)
Independent Operation	Supported (via internal UPS during outage)



Networking & Connectivity

Specification	Value
Ethernet Port (External)	1x Ethernet (Network Input)
LAN Function	External Network connectivity
Wi-Fi	Integrated
Cellular Module	Integrated GSM/LTE
SIM Support	4G Standard / 5G Optional
GNSS Module	Integrated GNSS receiver
VPN Compatibility	Tailscale, WireGuard supported
Remote Access	Secure LAN or VPN access
Offline Operation	Fully functional without internet connection
Video Processing API	Accepts raw video stream URL input
Detection Output API	Returns detection metadata and annotated detection stream URL

Cellular Data & Remote Server Push

Specification	Value
SIM-Based Internet Mode	Supported
Remote Server Push	Supported
Data Types	Video streams, image data, CSV detection logs
Transfer Trigger	Manual, Scheduled, or Event-Based
Destination	User-Defined External Server
Cloud Dependency	Not Required (Optional Only)
Transfer Security	Secure Network-Based Transmission

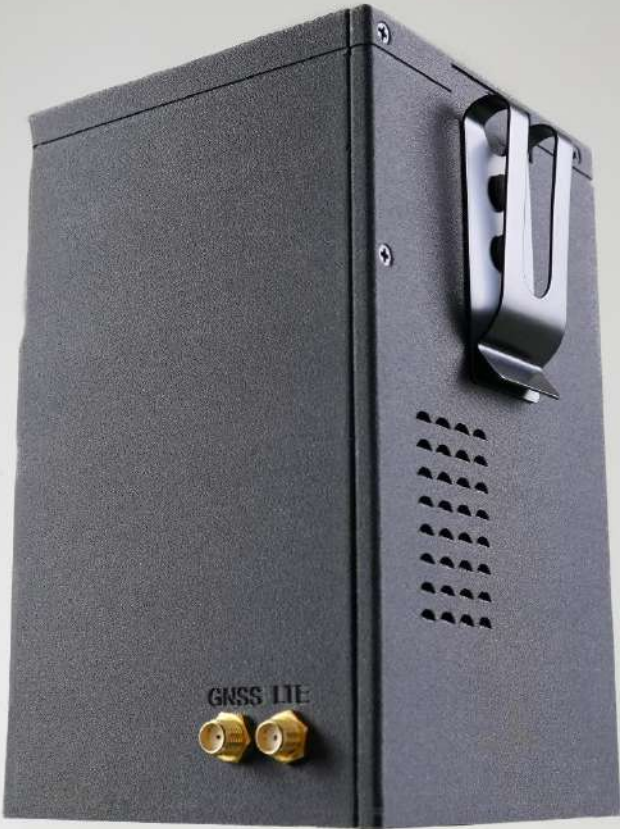


AI & Video Processing

Specification	Value
AI Deployment Mode	Fully Edge-Based (On-Premises Processing)
Max FPS (Single Stream)	10–60 FPS (model and configuration dependent)
Max Resolution Supported	Full HD (Visual & Thermal)
Multi-Camera Streams	Up to 4 simultaneous streams (FPS influenced by number of active streams)
Object Detection	Supported
Object Counting	Supported
AI Alarm Trigger	Real-time alerting supported

Storage

Specification	Value
Internal	512 GB Internal (Non-User Accessible)
External Storage	NAS via LAN Supported
Data Modes	AI Enabled / AI Disabled / No Recording Mode
Privacy Mode	Live Monitoring Without Recording Supported



Software Platform

Specification	Value
Software Name	SAI-HUB
Deployment Mode	On-Premises or Online (optional subscription)
Access Type	Web-Based Interface
Localization	Supported

Cybersecurity & Deployment

Specification	Value
Processing Location	Fully Local (Edge)
Cloud Requirement	None (Optional Only)
Network Isolation	Supported
VPN Integration	Tailscale / WireGuard
API Access	Video Processing & Detection API supported
User Authentication	Role-Based Access Control
Data Control	User-Controlled Infrastructure
Transfer Security	Secure Network-Based Transmission

