

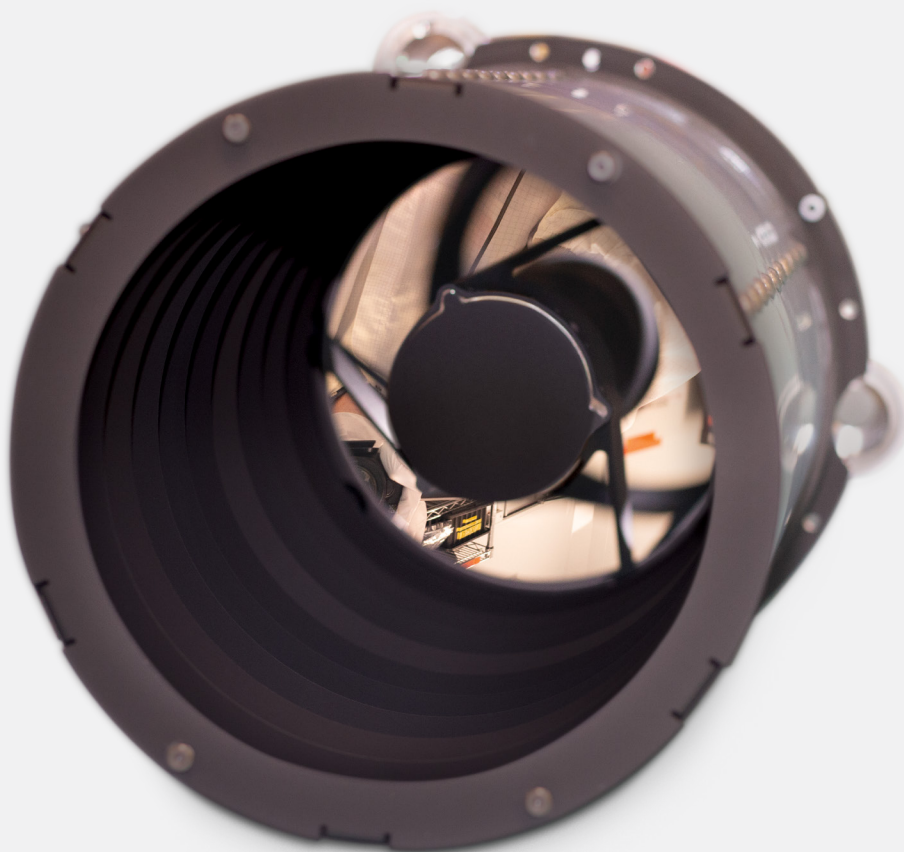


ABB MEASUREMENT & ANALYTICS | PRODUCT DESCRIPTION

LEMI 110-VN™ MULTISPECTRAL IMAGER

Precision Earth observation in a compact package

ABB is a global leader in space optics with over 50 years of experience delivering high-performance remote sensing instruments for both government and commercial missions. Our optical payloads have flown on flagship programs from major space agencies and are now increasingly deployed in the fast-growing private space sector.

The LEMI 110-VN multispectral imager is your gateway to actionable Earth intelligence. Designed for compact satellite platforms, this imager combines scientific-grade optics with a lightweight, thermally tolerant architecture—ready to scale with your constellation or enhance your single-satellite mission.

With more than 10 flight-proven units already operating in orbit, the LEMI 110-VN offers a trusted foundation for building or expanding your Earth observation capabilities. Its multispectral capability can be tailored to your application imaging, unlocking new possibilities for monitoring change, detecting patterns and delivering insights that matter.

What you can achieve with the LEMI 110-VN

- Deliver insights on land use, agriculture and infrastructure
- Detect and monitor environmental change with multispectral precision
- Support disaster response with timely, high-resolution imagery
- Track maritime activities and human presence across vast regions
- Build scalable, cost-effective Earth observation capabilities with proven hardware

ABB's imaging solutions are engineered to help you move from data to decisions faster, smarter and with confidence.

Features

- High resolution: 4 m GSD @500 km
- Multispectral: Up to 16 bands (400–900 nm)
- Wide coverage: Pushbroom operation, 16 km swath @500 km
- Maturity: More than 10 in orbit



See more. Understand faster. Act decisively.

The LEMI 110-VN delivers multispectral imagery that helps you detect, analyze and respond to change—anywhere on Earth. With a ground sampling distance of 4 meters, it offers sufficient detail to monitor infrastructure, detect ships and vehicles, and observe environmental features across large areas. Its 16 km swath width allows full coverage of major urban zones in a single pass—scanning cities, coastlines and critical zones.

Whether you’re tracking global development, responding to disasters or monitoring maritime activity, the LEMI 110-VN gives you the spatial and spectral acuity to act with confidence.

Because every mission is unique, the LEMI 110-VN is fully customizable across the visible and near-infrared spectrum. This unlocks AI-driven analytics, helping you extract insights from every pixel.

What you can monitor with the LEMI 110-VN

- **Disaster zones:** Detect wildfires, floods and earthquake damage in near real-time
- **Maritime activity:** Track vessels, monitor shipping lanes and ports, and detect illegal fishing
- **Climate change:** Track glacial retreat, coastal erosion and desertification
- **Agriculture and forestry:** Assess crop health, predict yields and monitor deforestation
- **Urban growth:** Observe infrastructure expansion and land use transitions

- **Monitor economic activity:** Analyze indicators such as vehicle density, port transshipment volumes and infrastructure usage to support trade monitoring, logistics planning and economic forecasting

With flight-proven units already in orbit, ABB’s imaging technology is ready to support your mission—whether you’re launching a single satellite or building a global constellation.

Specifications

Description	Value
Configuration	Pushbroom
Aperture diameter	110 mm
GSD	8 µrad (4 m @500 km)
System MTF	> 13% at 550 nm
Swath	1.86 deg (16 km @500 km)
Frame rate	1400-1700 Hz typical
Pixel depth	12 bits
Spectral bands	Up to 16
Spectral range	400 – 900 nm
Power consumption	5W typical
Weight	3.0 kg
Dimensions	363 × 177 × 177 mm
Operating temperature	0 to +20°C
Data interface	LVDS

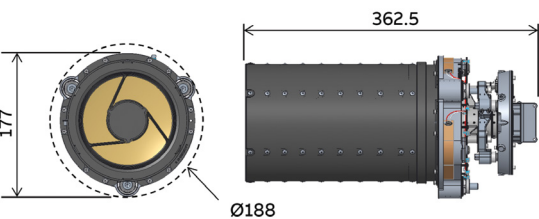


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