



Features

- Modular design allows for flexible integration to address safety and business data management functionality - Addresses all ITC IP transport requirements
- Fanless, rugged system with wide-range power supply support is well-suited for use onboard mobile assets including locomotives, buses, and maintenance and construction vehicles
- Multiple cellular uplinks; channel bonding, link aggregation, prioritization, link monitoring, and dynamic weighted load balancing
- Remote mobility management enabled by machine-to-machine (M2M) telematics that allows users to remotely monitor, control, and perform diagnostics

Introduction

The Lilee Systems™ TransAir LMS-2450 serves the requirements of the transportation, intelligent systems, and IoT markets as a seamless mobile connectivity gateway for various types of mobile assets. Building on the successful industry adoption of the Lilee Systems WMS-2000 that serves the needs of vital wayside connectivity, the TransAir LMS-2450 brings similar functionality to onboard systems. The LMS-2450 enables communication between central control office and additional mobile assets with integrated GPS, multiple mobile broadband modems, Ethernet, and Wi-Fi. Implementation of this system gives operators the ability to achieve safety and interoperability compliance as well as leverage the system for management of further business data without having to add more hardware to the already limited onboard cabinet space. The extensible modularity of the LMS-2450 provides robust mobile connectivity for passenger Wi-Fi, onboard information systems and surveillance, telematics and driver performance monitoring, and systems analytics applications. The LMS-2450 and DTS-2000 share compatibility with the interface card (IC) modules for a lower total cost of ownership.

Specifications

LMS-2450-ME-100 Chassis Specifications

I/O Interfaces

2 x Interface card blank slots for Type-2 Interface Card slots
4 x Smart Module blank slots for Type-1 Smart Modules or Smart Module for IC Jacket Cards
1 x RS-232 Serial Console / Maintenance / Power Reset port via 8-pin M12 for dedicated diagnostic connections
2 x 10/100/1000 Mbps Ethernet ports via 8-pin M12
1 x USB 2.0 port for SSM access
1 x 4-pin power connector via M12
1 x Ground connector

Protocol Support

IP Routing, DHCP, SNMPv2, SMS (Short Message Service), NTP, NAT

Security

IPsec, AES Encryption, SSH, DTLs

Physical Characteristics

Fanless design
IP54 compliant aluminum housing
Dimensions (H x W x L) 9.25 x 6.2 x 11.5 in (235 x 157 x 292 mm)
Net Weight 13.96 lbs. (6.33 kg)
Installation 5 MCU standard S-590 Modular Concept Unit
NAS622 LSI rack mounting kit (optional)

Environmental Limits

Operating Temperature -40 to +70 °C (-40 to +158 °F)
Storage Temperature -40 to +70 °C (-40 to +158 °F)
Tunnel Temperature -40 to +100 °C (-40 to +112 °F)
Ambient Relative Humidity 5% to 95% (non-condensing)

Power

Input Voltage 10 to 30 VDC
Power Connector 4-pin M12
Power Consumption (max) 32 W (chassis only)

Certifications

FCC Part 15 Subpart B
EN50155
AAR S9401
EN60950-1
RoHS compliant



LED Indicators

PWR, RDY, ALM

Ordering Information (subject to change)

SKU	Description
LMS-2450-ME-100	LMS-2450-ME-100 Chassis (5MCU) Starter Cable Kit: 1 x M12 to DE-9 serial, RJ45, and power reset button cable, 1 x M12 to 4-pin power connector
IC-GPS-P	Precision GPS Interface Card
IC-LTE	4G Cellular Interface Card (USA)
IC-LTE-G	4G Cellular Interface Card (Global)
IC-LTE-GPS	4G Cellular + GPS Interface Card (USA)
IC-LTE-GPS-G	4G Cellular + GPS Interface Card (Global)
IC-WIFI-11N	802.11b/g/n Wi-Fi Interface Card
SM-GE-6M	6-port M12 Gigabit Ethernet Switch Smart Module
SM-AE-AK	Application Engine with KVM
SM-IC-JK	Smart Module for Interface Card Jacket Card
IC-BLANK	IC Blank
SM-BLANK	Smart Module Blank

Power Consumption Summary

SKU	Description	Power Consumption (watts)
LMS-2450-ME-100	LMS-2450-ME-100 Chassis	32 W (max)
IC-GPS-P	Precision GPS Interface Card	+ 0.26 W (max)
IC-LTE	4G Cellular Interface Card (USA)	+ 3.2 W (max)
IC-LTE-G	4G Cellular Interface Card (Global)	+ 3.2 W (max)
IC-LTE-GPS	4G Cellular + GPS Interface Card (USA)	+ 3.2 W (max)
IC-LTE-GPS-G	4G Cellular + GPS Interface Card (Global)	+ 3.2 W (max)
IC-WIFI-11N	802.11b/g/n Wi-Fi Interface Card	+ 3.5 W (max)
SM-GE-6M	Smart Module for 6 port M12 Gigabit Ethernet	+ 8 W (max)
SM-AE-AK	Application Engine with KVM	+ 25 W (max)
SM-IC-JK	Smart Module for IC Jacket Card	+ 0.8 W