


Industrial Automation - Products & Configurations

LBM40 E Basic configuration > note 1		POWER [W]
Basic configuration	ARM Cortex A9 i.MX6 DualLite, 1 GHz • 1GMB RAM • 4GB eMMC PseudoSLC • fanless • isolated 24V DC power supply with MicroUPS function • 512kB MRAM for retentive variables backup • Windows Embedded Compact 7 Pro with Datalight Reliance Nitro file system • SoftPLC CODESYS SP v3.5x WinCE/ARM • Supported protocols: EtherCAT Master, MODBUS TCP Master • ASEM UBIQUITY PRO WinCE runtime • ASEM System Manager • 12 months warranty	19

LBM40 ES Basic configuration > note 1		POWER [W]
Basic configuration	ARM Cortex A9 i.MX6 DualLite, 1 GHz • 1GMB RAM • 4GB eMMC PseudoSLC • fanless • isolated 24V DC power supply with MicroUPS function • 512kB MRAM for retentive variables backup • 1 x RS232/485 isolated (DB15M) • Windows Embedded Compact 7 Pro with Datalight Reliance Nitro file system • SoftPLC CODESYS SP v3.5x WinCE/ARM • Supported protocols: EtherCAT Master, MODBUS TCP Master, MODBUS RTU Master • ASEM UBIQUITY PRO WinCE runtime • ASEM System Manager • 12 months warranty	20

LBM40 EC Basic configuration > note 1		POWER [W]
Basic configuration	ARM Cortex A9 i.MX6 DualLite, 1 GHz • 1GMB RAM • 4GB eMMC PseudoSLC • fanless • isolated 24V DC power supply with MicroUPS function • 512kB MRAM for retentive variables backup • 1 x CAN isolated with terminations (DB15M) • Windows Embedded Compact 7 Pro with Datalight Reliance Nitro file system • SoftPLC CODESYS SP v3.5x WinCE/ARM • Supported protocols: EtherCAT Master, MODBUS TCP Master, CANopen Master • ASEM UBIQUITY PRO WinCE runtime • ASEM System Manager • 12 months warranty	20

	E	ES	EC		
SoftPLC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SoftPLC CODESYS SP v3.5x for WinCE/ARM runtime	↓
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Retentive variables: Automatic backup of retentive variables on MRAM at every system switch-off and/or power supply interruption	-
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SoftPLC CODESYS SP + SoftMotion v3.5x for WinCE/ARM runtime	-
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SoftPLC CODESYS SP + SoftMotion + CNC v3.5x for WinCE/ARM runtime	-
SUPPORTED PROTOCOLS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EtherCAT Master, MODBUS TCP Master	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EtherCAT Master, MODBUS TCP Master, MODBUS RTU Master	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EtherCAT Master, MODBUS TCP Master, CANopen Master	
REMOTE ASSISTANCE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ASEM UBIQUITY PRO WinCE runtime	-
PROCESSOR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ARM Cortex A9 dual core processor • i.MX6 DualLite • 1 GHz • 400Mhz memory bus • Soldered on board	
MICROUPS & MRAM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MicroUPS, with backup function for microinterruptions max 500ms and 512kB MRAM (Magnetic RAM) for retentive variables	
WARRANTY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12 months on system and its variants	-

OPTIONS					
	E	ES	EC		
WARRANTY EXTENSION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Warranty extension to 18 months on basic system and its variants	↓
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Warranty extension to 24 months on basic system and its variants	↓
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Warranty extension to 36 months on basic system and its variants	↓

NOTES	
1:	For power consumption calculation we recommend to read the tips on pg. 4. The power values does not include the absorbed power of USB devices connected to the ports. Price does not include ASEM UBIQUITY DOMAIN that must be purchased one-off at the first order of a license or system that includes the UBIQUITY runtime. See pg.222



CODESYS SoftPLC WinCE/ARM for LBM40 main features	
PLC programming	IEC61131-3, CODESYS SP v3.x
Supported protocols	LBM40 E EtherCAT Master, MODBUS TCP Master
	LBM40 ES EtherCAT Master, MODBUS TCP Master, MODBUS RTU Master
	LBM40 EC EtherCAT Master, MODBUS TCP Master, CANopen Master
Variables backup	Retentive 64kByte
	Persistent 64kByte
	Management Automatic backup of retentive variables on MRAM at every system switch-off and/or power supply interruption
Main performances	Cycle time $\geq 2\text{ms}$
	Jitter $\pm 300\mu\text{s}$

For CODESYS SP details, see pg.228

ASEM UBIQUITY PRO main features	
Control Center application to access the service with intuitive and ergonomic user interface for a comprehensive machine park management	
Control Center SDK to interface with 3rd part applications	
PROXY server support	
Internet sharing with LAN devices	
Interactive tool: remote desktop (RDP sessions on Windows Server and multiple monitor), file transfer, task manager, chat, screenshots	
Optimized VPN with access limited to the remote device with Ubiquity Runtime	
Optimized VPN with entire access to the complete remote device sub-network and serial passthrough	
Multiple connections to a single Runtime with individual VPN per each Control Center client	
Connection log accessible from Runtime device	
Log and audit of last 30 days connections activities also exportable from Runtime side	
High level of security with exclusive use of encrypted connections and certificates	
Integrated VPN Firewall	
Support for Runtime update with automatic services restart	

For ASEM UBIQUITY details, see pg.222

ASM (ASEM System Manager). Control Panel utilities	
Backup&Restore	- Complete system cloning or selective backup and restore of the installed softwares
Antialiasing	- Softens the characters matrix
Screensaver	- Display brightness control or display switch off after an inactivity period
Touch Buzzer	- Enable touch sound-feedback
eMMC Usage	- Check the eMMC memory usage and evaluate the expected endurance
Kiosk Mode	- Hide the O.S. explorer interface and run PHMI runtime in 'kiosk' mode
Language Settings	- Easy installation of not european languages characters in HMI applications
Scrollbar	- Allows to change the scrollbars sizes
System reboot	- Reboot the system without switching off the power supply

TECHNICAL SPECIFICATIONS	
Case	Plastic case for DIN rail book mounting • ASEM logo on sticker
Overall dimensions & weight	See details on the related section
Operating System	Microsoft Windows Embedded Compact 7 Pro license with Datalight Reliance Nitro file system • Microsoft olographic sticker
Software	Control SoftPLC CODESYS SP v3.x for WinCE/ARM runtime (SoftPLC, SoftMotion, CNC) • license with 3S sticker
	Remote assistance ASEM UBIQUITY WinCE PRO runtime license with ASEM sticker
	Utility ASEM System Manager
Power supply	Input voltage 18÷36V DC • Power supply section integrated on board
	MicroUPS: backup function for microinterruption with supercapacitors • Max interruption: 500ms • First load: 30" • Rearm time: 15"
Motherboard	"All-In-One" type • ASEM R271/A
Processor	ARM Cortex A9 dual core • i.MX6 DualLite • 1 GHz, 400 MHz system memory bus • GPU (Graphic Processor Unit) integrated
RAM memory	1GB DDR3-800 • Soldered on board
Mass storage	eMMC (Solid State Disk) 4GB PseudoSLC, 8bit, file system organization • for projects and applications
Retentive memory	512KB MRAM (Magnetic RAM) for backup of retentive and persistent variables
SD slot	1 x Slot MicroSD integrated on board • external access
Rear access interfaces	LBM40 E LAN1: 1 x Ethernet 100 Mbps (RJ45) • LAN2: 1 x Ethernet 10/100/1000 Mbps (RJ45) • 2 x USB 2.0 (Type-A / host) • 1 x DVI-D
	LBM40 ES LAN1: 1 x Ethernet 100 Mbps (RJ45) • LAN2: 1 x Ethernet 10/100/1000 Mbps (RJ45) • 2 x USB 2.0 (Type-A / host) • 1 x DVI-D • COM: 1 x RS-232/485 isolated (DB15M)
	LBM40 EC LAN1: 1 x Ethernet 100 Mbps (RJ45) • LAN2: 1 x Ethernet 10/100/1000 Mbps (RJ45) • 2 x USB 2.0 (Type-A / host) • 1 x DVI-D • CAN: 1 x CAN isolated (DB9M) with terminations
Environmental specifications	Operating temperature: 0° ÷ +50°C • Storage temperature: -20° ÷ +60°C • Humidity: 80% (non-condensing)
Approvals	CE (EN 55022, EN 61000-3-2/3, EN 55024, EN 60950-1) • cULus LISTED (61010) pending
Standard warranty	12 months • Warranty management by ASEM headquarters

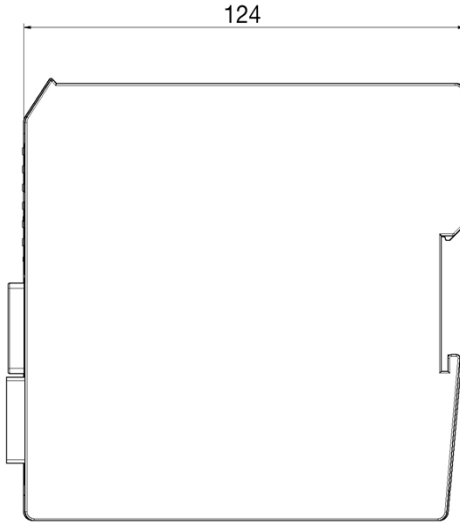


LBM40

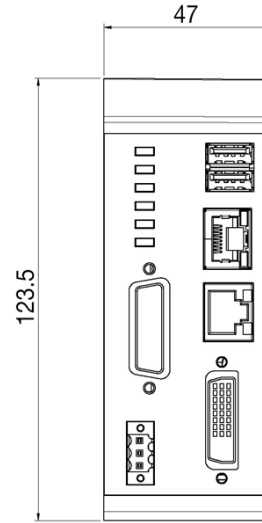
fanless

DIMENSIONS (mm)

SIDE VIEW

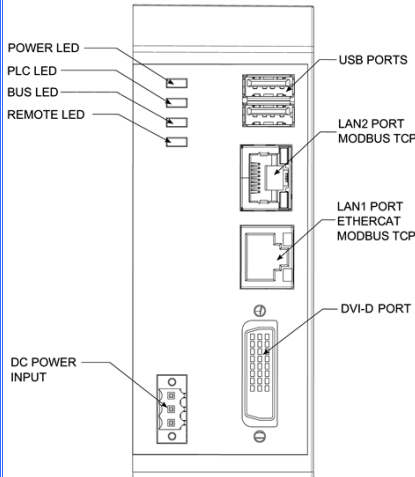


FRONT VIEW

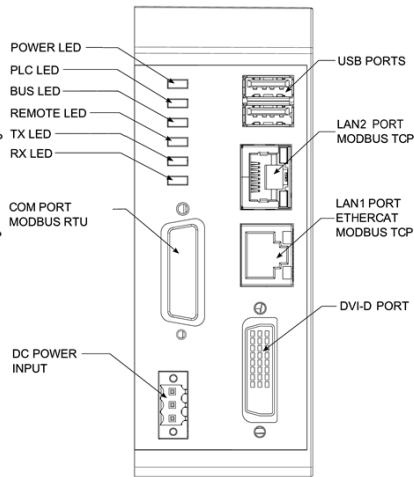


CONNECTORS VIEW

LBM40 E



LBM40 ES



LBM40 EC

