



Lumia embedded box

Datasheet

Connect
Ideas.
Shape
solutions.



LUMIA1BOX

LUMIA1BOX is ESA's new compact product that integrates all the functionalities necessary to control a machine; moreover, in combination with an edgeHMI of the LUMIA series, it allows to develop a completely web-based application compliant with the Industry 4.0 standard.

What you can do with a Lumia1box:

Fully control the machine cyclic with an application compliant with the standard IEC 61131.

Use the Codesys 3.5 development environment that has become a de facto market standard.

Manage the different axes according to PLC Open Part 1 and Part 2 using the ESA Motion Control library.

Connect remote devices via different high-performance fieldbuses (Ethercat, Profinet, Ethernet Ip, Modbus TCP).

The programming of the operating parameters is extremely simple through the ESA Control Panel web application that can be managed with a simple HTML5 browser.

1. Raspbian operating system
2. Processor fanless 4 core Cortex A72
3. Integrated Wifi client ed hotspot (2,5 GHz – 5 GHz)
4. 2 x LAN ports
5. 2 x USB ports (2.0 and 3.0)
6. RAM 2GB
7. Internal memory 16GB
8. DIN rail mounting
9. Codesys runtime 3.5
10. Library dedicated to motion control ESA MC
11. Ethercat, Profinet, Ethernet Ip, Modbus TCP fieldbuses



LUMIA1BOX011104	
O.S.	Raspbian Linux
Application software	ESA Control panel Codesys IEC 61131
Real time Fieldbus	Ethercat Profinet Modbus TCP
Bezel / Chassis	Alluminium
Processor - HMI	Quad-core Cortex A72 (ARM v8) 64-bit SoC @ 1.5 GHz
RAM	2G DDR4
Mass storage	8GB eMMC
Ethernet Port	1*1Gb+1*100Mb
Wifi	2,5 / 5 GHz (client & hotspot)
USB Port	1xUSB3.0 + 1xUSB2.0
Power Supply (Vdc)	24 (12 – 32)V DC – Class 2
Consumption (W)	6 W
Operating Temperature (°C)	0 ... + 50 °C
Storage Temperature (°C)	-20 ... + 60 °C
Humidity	<90% (non condensing)
External dimensions(W/H/D) (mm)	30/145/140
Weight (kg)	2,5 kg
Protection degree	IP20
Certifications	CE - RED (2014/53/EU): Safety: EN 62368-1:2018, EN 62311:2008 EMC: ETSI EN 301 489-1 V2.2.3:2019 ETSI EN 301 489-17 V3.1.1: 2017 Radio: ETSI EN 300 328 V2.2.2:2019, EN 301 893 V2.1.1:2017 UL



LUMIA2BOX011112	
O.S.	Raspbian Linux
Application software	Codesys IEC 61131
Real time Fieldbus	Ethercat Profinet Modbus TCP
Bezel / Chassis	Alluminium
Processor - HMI	Quad-core Cortex A72 (ARM v8) 64-bit SoC @ 1.5 GHz
RAM	2G DDR4
Mass storage	8GB eMMC
Ethernet Port	1*1Gb+1*100Mb
Wifi	2,5 / 5 GHz (client & hotspot)
USB Port	1xUSB3.0 + 1xUSB2.0
Power Supply (Vdc)	24 (12 – 32)V DC – Class 2
Consumption (W)	6 W
Operating Temperature (°C)	0 ... + 50 °C
Storage Temperature (°C)	-20 ... + 60 °C
Humidity	<90% (non condensing)
External dimensions(W/H/D) (mm)	30/145/140
Weight (kg)	2,5 kg
Protection degree	IP20
Certifications	CE - RED (2014/53/EU): Safety: EN 62368-1:2018, EN 62311:2008 EMC: ETSI EN 301 489-1 V2.2.3:2019 ETSI EN 301 489-17 V3.1.1: 2017 Radio: ETSI EN 300 328 V2.2.2:2019, EN 301 893 V2.1.1:2017 UL



Connect
ideas.
shape
solutions.

[ESA S.p.A. | www.esa-automation.com](http://www.esa-automation.com) |