# JETSYS-2010

## ROBUST BOX PC SOLUTION FOR AI EDGE COMPUTING



## **DESCRIPTION**

The new JetSys-2010 is an industrial-rugged Al-Box in Small Form Factor formate with a sophisticated passive cooling concept, featuring the new Nvidia® Jetson Orin™ NX 16 GB and the Nvidia® JetPack ecosystem. EN50155 complaint, the JetSys-2010 is application-ready for industries like Railway, Transportation, Industrial automation and many more. A wide range of interfaces and a robust product design provides state-of-the-art Al computing power even for challenging environments.



#### **Features**

- Semi-rugged Al-Box in Small Form Factor formate with a sophisticated passive cooling concept
- Featuring the new Nvidia® Jetson Orin<sup>TM</sup> NX 16 GB and the Nvidia® JetPack ecosystem
- EN50155 compliant
- Power, 2 x GBit Ethernet, USB and common serial Interface off the shelf
- Additional maintenance interfaces like USB-Console and DVI port (limited access)
- Optional extention and IO ready like GSML camera interfaces (on request)

## **SOFTWARE SUPPORT**

The design of the JetSys-2010 was kept close to the Nvidia® Jetson Orin™ Developer Kit. By this, the JetSys-2010 can benefit from Nvidias rich swet of Al tools and the Nvidia® JetPack SDK. Contact Elma for available support package and pre-install options.

## **APPLICATIONS**

Elma's JetSys-2010 is built for Al processing in demanding environments like Railway, Transportation or Industrial automation.

#### **RELATED PRODUCTS**







- > Al embedded computing board with CompactPCI Serial interface based on NVIDIA® Jetson Orin™
- > Rugged AI embedded computing platform in small form factor with M.2 support
- > Scalable industrial computing platforms can be mounted in any industrial environment with wide support of field buses

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## **SPECIFICATIONS**

| Dimen | sions |
|-------|-------|
|       |       |

| Height | 64 mm  |
|--------|--------|
| Width  | 182 mm |
| Depth  | 161 mm |
| Weight | 4.5 kg |

#### **Processor**

Nvidia® Jetson Orin™ NX 16 GB

#### Storage

M.2, 1TB; M.2 2242 NVMe SSD

#### Interfaces

2x Gigabit Ethernet, LAN 1; LAN 2, 1x USB 2.0, 1x User defined, S1

Option 1 RS 232

Option 2 RS 485

Option 3 1x CAN

#### Cooling

| Cooling concept  | Passive, conduction cooled |
|------------------|----------------------------|
| Protection class | IP Δ <sub>X</sub>          |

## Power supply unit

| Output (max.)                   | 50 W  |
|---------------------------------|---|
| Output voltages per unit (max.) | 12 V DC   |
| Input voltage                   | 16.8 – 154 V DC   |
|                                 | Compliant to EN50155  |
|                                 | IEC 60571 Railway application-electronic equipment used on rolling stock<br>EN45545-2:2020 compliant with all hazard levels HL1-HL3 |

#### **Environmental**

| Ambient conditions      | -20 °C - +70 °C (both operating and storage) |
|-------------------------|--|
| Shock/vibration         | EN 50155                                     |
| EMC Emission / Immunity | EN 50155                                     |
| Safety                  | EN 50155                                     |
| Fire & smoke            | EN 45545-2                                   |

#### **Operating system**

Ubuntu Linux 20.04

## **Jet Pack Support**

Jet Pack 5.1.2

| EXAMPLE ORDER NUMBER | PART NUMBER |
|----------------------|-------------|
| JetSys-2010          | 070-080     |

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#### Please contact our sales team for more details.

China: +86 21 5866 5908 Germany: +49 7231 97 34 0 Singapore: +65 6479 8552 United Kingdom: +44 1234 838 822 France: +33 388 56 72 50 Israel: +972 3 930 50 25 Switzerland: +41 44 933 41 11 United States: +1 510 656 3400

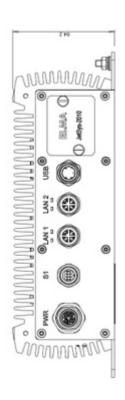
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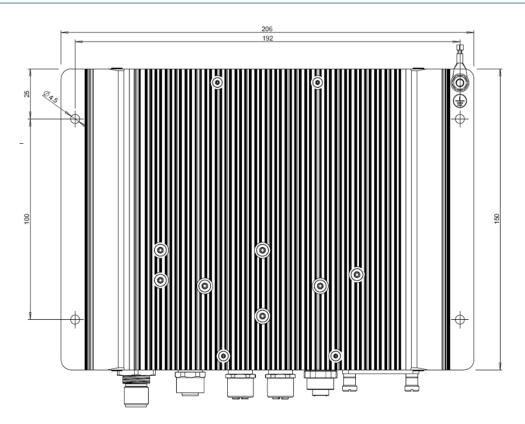
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## **DIMENSIONS**





# **CABLING OPTIONS**

| Cable Kit |         |  |
|-----------|---------|--|
| Pos       | Elma PN | Description  |
| 1         | 072-852 | Cablekit 1<br>- 2x M12 to RJ45, 2m<br>- 1x M12 to USB 2.0, 2m<br>- 1x M12 to RS232, 2m<br>- 1x USB Adapter F/F |
| 2         | 072-857 | Cablekit 2 - 2x M12 to RJ45, 2m - 1x M12 to USB 2.0, 2m - 1x M12 to RS485, 2m - 1x USB Adapter F/F             |
| 3         | 072-861 | Cablekit 3 - 2x M12 to RJ45, 2m - 1x M12 to USB 2.0, 2m - 1x M12 to CAN, 1m - 1x USB Adapter F/F               |

| Indiv | Individual cabling |                       |
|-------|--------------------|-----------------------|
| Pos   | Elma PN            | Description           |
| 1     | 071-869            | 1x M12 to RJ45, 2m    |
| 2     | 072-758            | 1x M12 to USB 2.0, 2m |
| 3     | 072-759            | 1x M12 to RS232, 2m   |
| 4     | 072-922            | 1x M12 to RS485, 2m   |
| 5     | 072-760            | 1x M12 to CAN, 1m     |
| 6     | 072-854            | 1x USB Adapter F/F    |

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