

MESBox

Manufacturing Execution System data collection & elaboration unit



Key Features

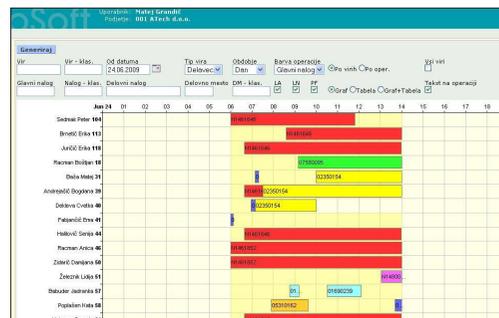
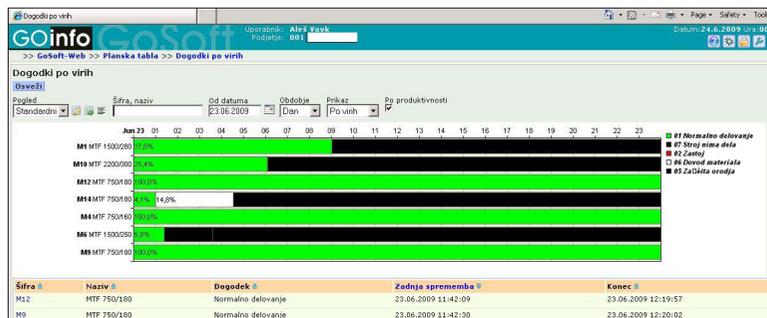
- MESBox is a data collection and elaboration unit designed for the implementation of real-time Manufacturing Execution Systems on the shopfloor.
- MESBox is capable of collecting digital and analog data from simple relay activation reading to CAN communication linking. MESBox can store, elaborate and transfer data to various formats used in MES and ERP systems for further data elaboration.
- MESBox is available as an ALL-IN-ONE unit including a mains power supply and integrated UPS (uninterruptible power supply) and battery.
- MESBox can be complemented with various user interfaces as industrial keyboards, touch screens, but also pushbuttons, relays, switches and custom solutions.
- MESBox can directly operate with various accessories as barcode readers, RFID TAG & CARD readers, GPRS remote data transfer units and other accessories.
- MESBox comes with the MES DC software for data and configuration exchange that allow simple and fast set-up of each application.
- For MESBox users ATech provides comprehensive technical support.

Target Applications

MES REAL-TIME DATA COLLECTION, ELABORATION AND TRANSFER

INDUSTRIAL DATA LOGGING

HIGHER LEVEL SHOP FLOOR CONTROL

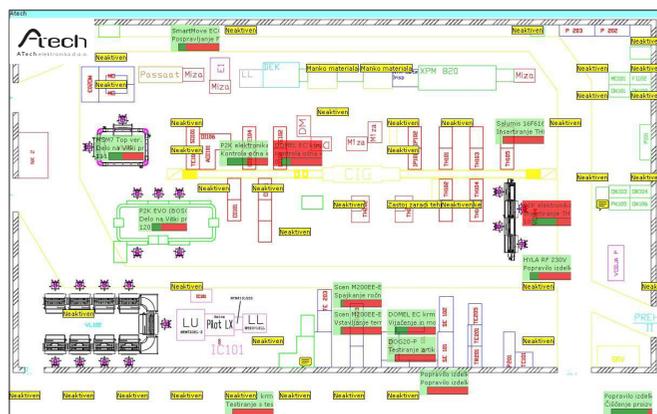


MES DC SOFTWARE:

MESBox customers have available the MES DC (Data Collector) PC software used to exchange data between the Information system and shop floor.

MES DC is used to:

- configure the MESBox operation; reporting and logging period, mode, off-line logging set-up, MESBox features classes and instances configuration, synchronization with MES, etc.,
- data retrieval from MESBox.



TECHNICAL DATA:

Power supply:	230V ± 10%, 50Hz
Temperature:	0°C to +50°C operating, -20°C to +70°C storage
Humidity:	10% to 90% RH, non condensing
Digital inputs:	<ul style="list-style-type: none"> • DIS: 6 PNP inputs (sink), active voltage range 10V DC to 30V DC, galvanic isolation (6 groups of 1 input) • DIF: 8 NPN inputs (source), max. current 10 mA, galvanic isolation (1 group of 8 inputs)
Digital outputs:	<ul style="list-style-type: none"> • DO: 8 NPN outputs (sink), max. voltage 35V DC, max. current 10 mA • RO: 6 relay outputs, dry contact with operating voltage 8V AC/DC to 35V AC/DC, max. current 3 A, or as 12V DC output, jumper selectable, galvanic isolation (1 group of 6 outputs)

Software features (7 classes)

MBC - MESBox Controller; 1 instance: The MESBox Controller feature represents the controller itself. This feature is used to control the device and to retrieve the device status. As such is always enabled, regardless of the configuration. **DIS** - Digital input, slow, 6 instances: Slow digital inputs with maximum input frequency of 10Hz. A total of 6 inputs are available. **DIF** - Digital input, fast, 8 instances: Fast digital inputs with maximum input frequency of 10kHz. A total of 8 inputs are available. **DO** - Digital output, 8 instances: Digital outputs. A total of 8 outputs are available. **RO** - Relay output, 6 instances: Relay outputs. A total of 6 outputs are available. **CNT** - Counter, slow, 6 instances: Slow digital counters with maximum input frequency of 10Hz. A total of 6 counters are available. **RBG** - Radio button group, 1 instance: Inputs (class DIF) and outputs (class DO) linked to form a radio button group. The state of the group represents the current active button. This feature overrides the DO feature if enabled.

Communication interfaces:	RS232, speed up to 115,2kb/s, galvanic isolation RS485, speed up to 115,2kb/s, galvanic isolation ETHERNET 10BaseT, 100BaseTX CAN, speed up to 250kb/s, galvanic isolation
Compliance:	EN 60950-1, EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3
Housing:	ABS, IP65
Dimensions:	340mm x 150mm x 70mm (without cable glands)
User interfaces:	Industrial keyboards, touch screens, custom

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