

ION8 EB — Commissioning Form

Field checklist · see the Installation Guide (RevD) for details



Site / machine	Date
Device ID (last 6 digits of Wi-Fi name)	Operating mode ☐ ETH Bridge ☐ ETH2BLE

1. Initial checks

☐ Supply 10–30 VDC; +V (terminal 1) and 0 V (terminal 2) connected correctly, cable strain-free
☐ Ethernet cable plugged in; link light is on
☐ RS485: A (terminal 5), B (terminal 6), reference (terminal 8) correct; for 120 Ω at the line end, terminal 7 linked to 5 (only on the device at the line end)
☐ Antenna fitted and not behind a metal enclosure/cover; line of sight/proximity to the RIOs adequate
☐ Machine in a safe state; timeout/heartbeat supervision defined on the PLC side (mandatory for protocols other than S7)

2. Mode and network settings

☐ Connected to the Wi-Fi management access point (ion8eb_XXXXXX / ethble_XXXXXX, 192.168.4.1) and the interface opened
☐ Correct mode selected in the Device Mode ("Cihaz Modu") card; saved and the device restarted
☐ Ethernet: DHCP / fixed IP configured; access tried via ion8eb.local or IP
☐ Wi-Fi service window time and (if needed) network name set; management access point password changed

IP / Subnet / Gateway	Service window (min)
-----------------------	----------------------

3. Pairing (ETH Bridge: RIOs · ETH2BLE: device pair)

☐ ETH Bridge: pairing mode opened, RIOs assigned to slots from the list; ETH2BLE: 3 s button press on both devices, 4 LEDs blinked
☐ Number of connected RIOs matches the expected number; slot–RIO mapping written below
☐ Wireless Connection Profile selected: ☐ Speed ☐ Range (recommended in distant/obstructed environments)

Slot 0–7 / RIO model-ID
ETH2BLE pairing group

4. Protocol settings (tick those in use)

☐ S7: PLC IP / rack / slot entered; optimized block access disabled and PUT/GET permission enabled in TIA; DB size and tags consistent; S7 badge connected
☐ Modbus TCP: port 502; address tables (read 2000, write 3000, diagnostics 4000) given to the client
☐ OPC UA: port 4840; used only in an isolated control network
☐ EtherNet/IP: tag names, CPU slot and period entered; read and write verified in the PLC

- ☐ **RS485:** baud / parity / stop (8N2, 8N1 or 8O1 recommended) identical at both ends; if master, response timeout set according to the wireless latency

Baud / parity / stop

PLC IP

5. Firmware signature

- ☐ Build signature in the interface header (YYYY.MM.DD.HH:MM.SS) read and written below; same as the version announced by IONIA

6. Functional checks

- ☐ When RIO inputs change, the correct bit/word appears instantly in the PLC/SCADA
- ☐ An output written from the PLC drives the corresponding RIO output correctly
- ☐ S7: when the PLC connection is cut, RIO outputs go to a safe (zero) state and are restored when the connection returns
- ☐ Other protocols: PLC/SCADA timeout and heartbeat behaviour tested
- ☐ Data is read from / written to RS485 devices; error counter does not increase
- ☐ After power cycling the device, settings and pairings are in place and connections are re-established automatically

7. Signal level

- ☐ Signal strength for every RIO is adequate in the interface and on the LEDs (if weak, antenna/placement improved or switched to the Range profile)

Weak-signal slot / dBm

8. Configuration backup

- ☐ Settings backup (JSON) exported from the interface and saved in the project folder; passwords not included in the backup

Backup file name / location

9. Handover

Site / machine

Device ID (SSID suffix)

Firmware signature

Date

Notes / open items

IONIA representative (Founder & Managing Director) — name, signature

Customer representative — name, signature