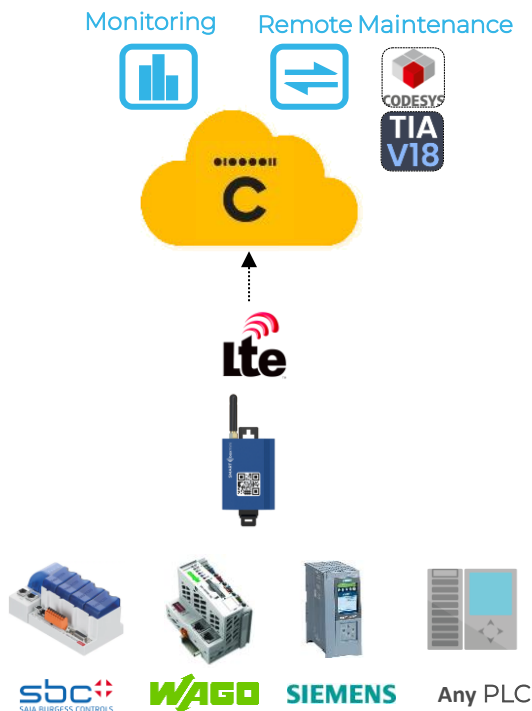




SMARTaccess Monitoring and Remote Maintenance

Many systems at the end customer site are equipped with modern PLC and control technology but are *not* connected to *the operator's IT infrastructure*. The SMARTbox mini ETH connects these stand-alone "island systems" to the IoT platform independently of IT and enables *central monitoring and remote maintenance – without VPN* and without a local network infrastructure.



Industries:

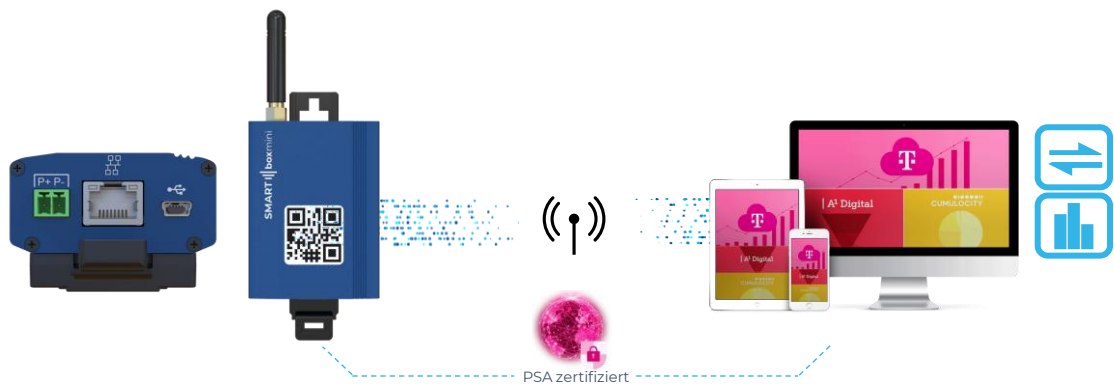
Water & Wastewater, Energy & Utilities, Building and Air Conditioning Technology, Refrigeration & Compressed Air, Mechanical and Plant Engineering, Municipal Utilities & Infrastructure, Automation

Monitoring / Cloud:

- *All systems at a glance* – one central cloud dashboard instead of many manufacturer portals
- *Direct connection* – meters, inverters & controllers via Modbus TCP & BACnet
- *Uniform database* – easy transfer to SCADA/energy management via API
- *Everything traceable* – central role and audit logs

Remote maintenance:

- *Remote access without a VPN client* – access to all IP devices behind the box
- *IT-independent* – own remote maintenance for external locations that is separate from the company network
- *Maximum security* – only outgoing TLS tunnels, no open ports, works behind NAT & cellular
- *One-click access* – SSH/VNC with existing SCADA and engineering tools, scalable for many locations



SMARTbox mini ETH

- Power supply: 12-24VDC
- Mold facture: 5cm x 7cm x 2.8cm
- SIM card: 4FF
- Mounting: DIN rail
- Cellular: LTE Cat1 Uplink 5 Mbps Downlink 10 Mbps
- Region: EMEA or NA or LATAM
- RJ45 Ethernet Interface: IEEE 802.3 Ethernet 10/100/1000Mbps



IoT Plattform Cumulocity IoT

Monitoring / Cloud

- PSA-certified digitization line
- Dashboard for monitoring Modbus TCP & BACnet* devices
- TLS-secured communication to the cloud
- Central role and rights management with audit logs

Remote maintenance

- VPN-free remote access via TLS-secured outbound tunnels
- SSH-over-WebSocket routing through the IoT platform (no direct IP path required)
- Supported remote protocols: SSH, VNC (UI & CLI)
- Local Proxy/CRA API for SCADA, PLC and Engineering Tools

IoT Solution

SMARTaccess

1 x SMARTbox mini ETH
1 x Remote access

Plus: own SIM card; optional 1GB/3GB provided by PSsystem



*Cloud Service without SIM