



- **Production Grade**
- **Hands-on Learning**
- **Preinstalled IoT Application**
- **Simulation of Industrial Use Cases**
- **Ready to Go**

## Features

**Production Grade** - Leverages production-grade hardware, software and services to provide a familiar development environment to Embedded, IT and OT developers

**Hands-on Learning** - Shows every building block of a sophisticated industrial IoT application, how to create a bidirectional connection with the Cloud and how to do remote management

**Preinstalled IoT Application** - Provides a real-world example where a IoT Edge Gateway and a PLC are used to create a link between the Cloud and the Field

**Simulation of Industrial Use Cases** - Includes support for ModBus and a PLC, it is designed to be expandable beyond the included example, and to interface with other user devices

**Ready to Go** - Packages HW, SW, a Cloud license and accessories to get started immediately

## Description

The EDCK 4001 is a Development Kit for Everyware Cloud that provides a learning environment and a testbed for industrial IoT applications; it targets professional developers with an Embedded, IT or OT background.

Creating an End-to-End solution typically requires bridging Field devices with Cloud-based services; the EDCK 4001 replicates a complete scenario, in which the field devices are simulated by a panel that provides some data sources and receivers (buttons, LEDs, etc). The bidirectional data and command flow between the Cloud and the Field is managed by a Gateway, which is connected to a PLC that controls the panel.

The preinstalled IoT application shows how to implement a complete solution, including remote device management and OTA package deployment. The EDCK 4001 includes a [ReliaGATE 10-11](#), a Eurotech Multi-service IoT Edge Gateway for industrial applications based on the TI AM335X Cortex-A8 (Sitara) processor family, with 512MB of RAM, 4GB of eMMC and a user-accessible microSD slot.

The ReliaGATE 10-11 comes with a genuine Oracle Java SE Embedded 8 Virtual Machine and [Everyware Software Framework \(ESF\)](#), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT Edge Gateways.

Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with [Everyware Cloud \(EC\)](#), [Eurotech IoT Integration Platform](#).

A trial EC license is also included, providing advanced services like data retention and retrieval, analytics, dashboarding, VPN and device management, including OTA updating.

EDCK 4001 also includes a professional Reactive Blocks™ by Bitreactive trial license, a visual tool for developing reactive or event driven applications for IoT or other embedded systems.

| Ordering code: REGATE-10-11-36-DK00 |             |  |
|-------------------------------------|-------------|--|
| PROCESSOR                           | CPU         | TI AM3352 800MHz, 1 Core   |
| MEMORY                              | RAM         | 512MB DDR3   |
| STORAGE                             | Embedded    | 4GB eMMC   |
|                                     | Other       | 1x microSD Slot (User Accessible)  |
| I/O INTERFACES                      | Ethernet    | 2x 10/100Mbps - RJ45   |
|                                     | USB         | 2x Host 2.0 (Noise and Surge Protected) - Type A   |
|                                     | Serial      | 2x RS-232/RS-485 (Surge Protected, RS-485 Termination and Fail-safe Resistors) – 1x Serial Console TTL |
|                                     | CAN 2.0B    | 2x CAN bus With 5V (100mA) Power Out   |
|                                     | Digital I/O | 2x Digital Input 5V (TTL), 1KV Optoisolated – 2x Digital Output (40VDC), 30mA Sink                     |
| RADIO INTERFACES                    | Cellular    | Optional Accessory: ReliaCELL 10-20  |
|                                     | GPS         | Optional Accessory: ReliaCELL 10-20  |
|                                     | Wi-Fi / BT  | b/g/n, BLE   |
| OTHER                               | LEDs        | 1x Power, 1x Cellular, 4x Programmable   |
|                                     | Buttons     | 1x Reset, 1x Programmable  |
| POWER                               | Input       | 9-36VDC, with Transient Protection, Vehicle Ignition Sense   |

For more specifications and certifications, please check the ReliaGATE 10-11 datasheet.

| Included Software |               |   |
|-------------------|---------------|---|
| SOFTWARE          | OS            | Eurotech Everyware Linux  |
|                   | SDK           | Yocto-based Eclipse Tooling   |
|                   | IoT Framework | Oracle Java SE Embedded Version 8- Everyware Software Framework (Java/OSGi) |

| Trial Licenses |       |  |
|----------------|-------|--|
| LICENSE        | Cloud | Everyware Cloud Trial License                |
|                | SDK   | Reactive Blocks by Bitreactive Trial License |

| Included Accessories |               |   |
|----------------------|---------------|---|
| PLC                  | PLC           | 1x DirectLOGIC DL05 PLC   |
| DEMO BOARD           | Demo Board    | 1x Demo Board with: 1x Momentary Button, 3 ON/OFF Buttons, 3x LEDs, 1x RGB LED, 1x Quad Counter     |
| I/O INTERFACES       | Ethernet      | 1x RJ45 Male Cable  |
|                      | Serial        | 1x RJ12 Male to Terminal Block 10p Serial Cable – 1x USB to Serial TTL Cable Converter (Debug Port) |
| RADIO                | Wi-Fi / BT    | 1x Dipole Wi-Fi / Bluetooth (2.4/5GHz) Antenna with RP-SMA Connector                                |
| OTHER                | Documentation | 1x Reactive Blocks Setup Guide, 1x Everyware Cloud Setup Guide                                      |
| POWER                | AC-DC PSU     | 1x 24VDC (24W) Power Supply Unit with Terminal Block  |
|                      | Blades        | 3x Power Blades for Wall Mount Adapter (US, JP, EU, UK)   |
| MECHANICAL           | Mounting      | 1x Aluminum Wall Mount Bracket  |

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