



- **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

<b>PROCESSOR</b>	CPU	TI AM3352 800MHz, 1 Core
<b>MEMORY</b>	RAM	512MB DDR3
<b>STORAGE</b>	Embedded	4GB eMMC
	Other	1x microSD Slot (User Accessible)
<b>I/O INTERFACES</b>	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
<b>RADIO INTERFACES</b>	Cellular	Optional Accessory: ReliaCELL 10-20
	GPS	Optional Accessory: ReliaCELL 10-20
	Wi-Fi / BT	b/g/n, BLE
<b>OTHER</b>	LEDs	1x Power, 1x Cellular, 4x Programmable
	Buttons	1x Reset, 1x Programmable
<b>POWER</b>	Input	9-36VDC, with Transient Protection, Vehicle Ignition Sense

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

## Included Software

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

## Trial Licenses

<b>LICENSE</b>	Cloud	Everyware Cloud Trial License
	SDK	Reactive Blocks by Bitreactive Trial License

## Included Accessories

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

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