



- **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	Yocto 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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