EASY LOGIC

SMART ID SOLUTIONS
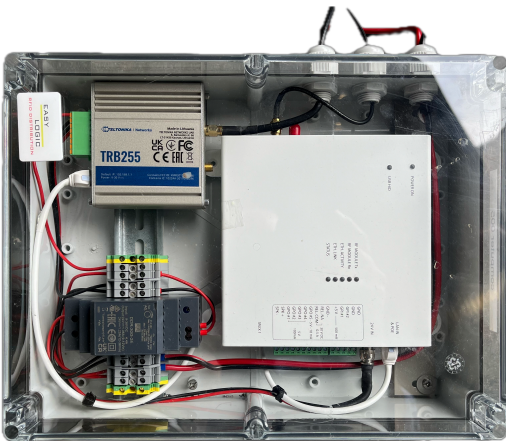
Integrated RFID Readers

INTEGRATED STAND-ALONE RFID READER SYSTEMS

EasyLogic has developed RFID systems, with embedded software, combined with a Teltonika 4G router. Together with suitable RFID antennas this system can be installed in your business, or with your customers, to track and trace goods in your supply chain, automatically order new parts, or any other standard RFID activity.

Requiring no special skills to install and configure, the reader connects with the EasyLogic configuration server for software updates, automated monitoring of its operation, and retrieves all details of its operating configuration, including endpoints for the transactions and any required security certificates.

The transactions can be sent to Azure IoT, Cumulocity, or the EasyLogic Track and Trace middelware using REST api's or MQTT.

Since we now have a solution which is simple to install and deploy, but above all very cost effective, we have found that customers are deploying these systems very widely in their businesses.

EASYLOGIC CONFIGURATION SERVER

Standard functionality provided by our configuration server:

READER AND ANTENNA PROFILE
Here we describe how many antennas are connected to the reader, directly or with a multiplexer. Up to 16 antenna's can be specified.

POWER ALGORITHM
Depending on the usage, we use sophisticated algorithms, reading multiple times at different power levels in order to identify and eliminate reflections of tags, or to prevent spurious one-off reads. This can also be specified remotely. We filter on RSSI, counts and phase information.

SIMPLE FILTERING
We can use SGTIN or EPC filtering, so that we only read tags that we are meant to read.

TRANSACTION DESTINATION
We specify where the read tags should be sent. This can be a REST API, an MQTT end-point, or directly into a database. We have built interfaces to ERP systems like SAP, Microsoft Dynamics, Azure IoT, Cumulocity and many others. We can distribute device certificates for authentication to the RFID devices under control and handle token renewal.

OPERATION MONITORING AND ALERTING
We monitor the on-line status of our RFID readers and the modem connection, using heart-beat signals. We can alert you if something is amiss. We have remote access to the system though a secure connection so that we can investigate if there are problems. We can automatically distribute software updates and configuration changes.

QR CODE
All our readers have a QR code. With this code, you can use a telephone or tablet to log into the control panel of your device, and check it's status and last transactions.

DASHBOARD
Upon request we can deliver dashboards which give you immediate insight in the operation of your systems.

INTERACTION WITH MACHINES
Our RFID readers have 4 General Purpose I/O's which can be used to act if certain tags are detected. Using the correct router we can create interfaces to:

- Modbus, PROFINET or RS232/485

- any Ethernet based system, e.g. MQTT

Contact us for more information via sales@easylogic.nl or on +31-182-389530.