THE CONNECTIVITY CORE OF THE SMYZE ROBOBARISTA

HIGHLIGHTS

- Smyze is a Switzerland-based international team of engineers revolutionizing B2C beverage sales by combining robotics, IT, and beverage technologies.

- Its Smyze Robobarista is a fully-independent robot that rivals the quality of human baristas when it comes to making beverages – but with maximized, automation-enhanced efficiency.

- Connecting the robot's orchestra of hundreds of industrial-grade components is the RUT360 industrial cellular router by Teltonika Networks, bringing LTE Cat 6 connectivity with extra flexibility, reliability, and remote management capabilities.

THE CHALLENGE – MANY ROBOTS FOR MANY SUBPAR DRINKS

The beverage industry relies heavily on technology. From ensuring Wi-Fi coverage in cafés to remote maintenance of industrial coffee machines, IoT in particular has been energizing this market with new forms of enhanced efficiency.
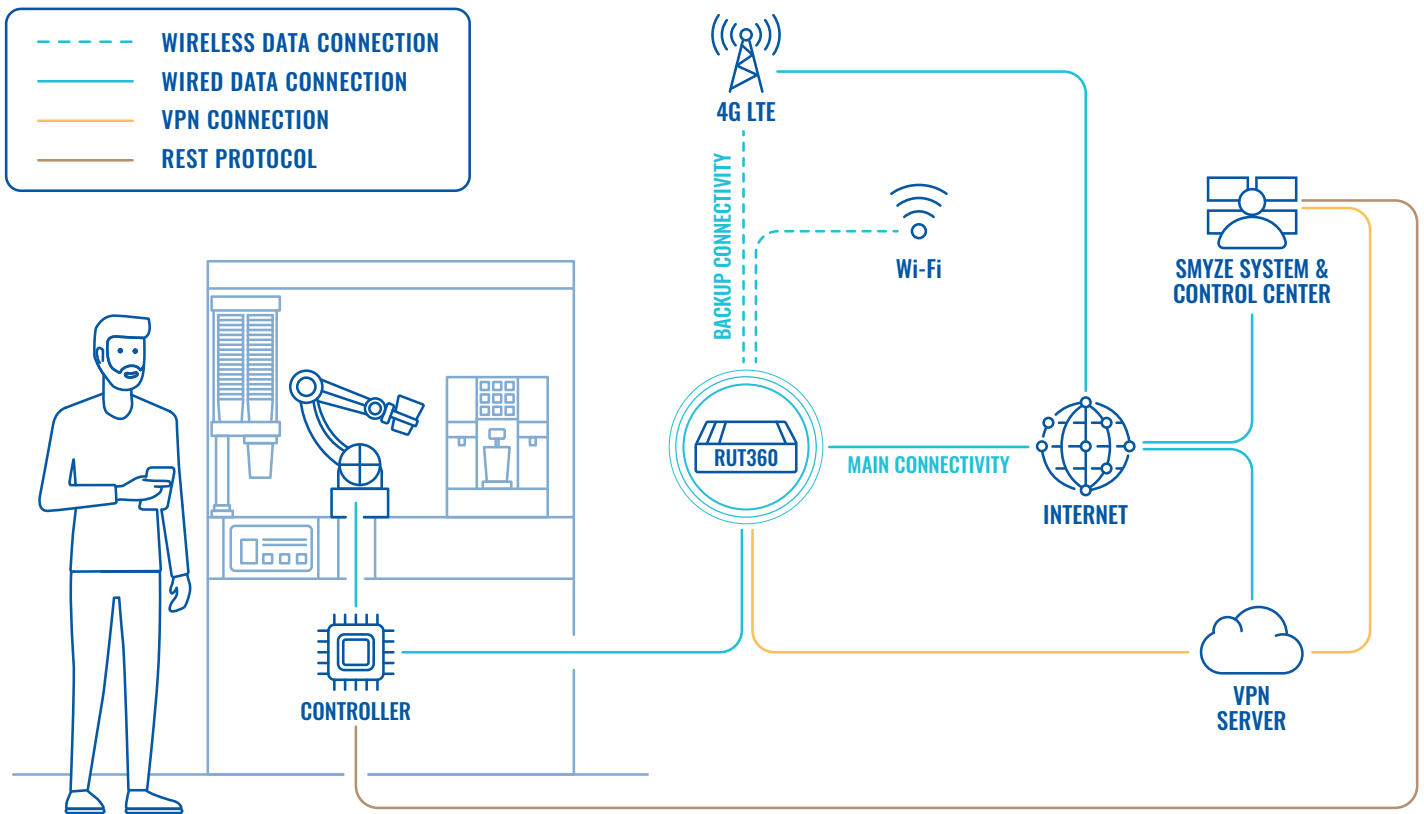
One area ripe for evolution is automated beverage making. Let's be honest – the quality of coffee made by your average retail or enterprise coffee machine is a far cry from what your local barista can produce. Automated orange juice makers fare better, and pretty much every beverage you can think of falls somewhere in the middle.

More importantly, even when quality is removed from the equation, a coffee machine cannot also make orange juice. This lack of output centralization is the main differentiator between a human barista and a robot barista.

The Smyze Robobarista seeks to revitalize the market by consistently producing barista-caliber coffee, juice, and other types of beverages. Once installed, it could serve customers at any venue as though it was the entire staff of a café or juice bar – without even a drop of product quality lost.

Naturally, achieving this is an orchestra of hundreds of industrial-grade components, sensors, and specialized software that must all work in seamless synergy. To guarantee this process, reliable Internet connectivity and remote management capabilities are a must.

TOPOLOGY

- - - - WIRELESS DATA CONNECTION
———— WIRED DATA CONNECTION
———— VPN CONNECTION
———— REST PROTOCOL

4G LTE

BACKUP CONNECTIVITY

Wi-Fi

RUT360

MAIN CONNECTIVITY

INTERNET

CONTROLLER

VPN SERVER

SMYZE SYSTEM & CONTROL CENTER

THE SOLUTION – ONE ROBOT TO BREW THEM ALL

The engineers who developed the Smyze Robobarista chose the RUT360 industrial cellular router by Teltonika Networks to empower their robot with 360 degrees of robust, reliable LTE Cat 6 connectivity.

The RUT360 is connected via a VPN-secured LAN and Robobarista's main controller to a wide array of CPUs, MCUs, and other intelligent components. Depending on any given deployment, this LAN may be of a wired connection, Wi-Fi, or mobile network.

The LAN also establishes remote communication between the controller and Smyze's system and control center via Smyze's REST API integration protocol. Compact in size and encased in rugged aluminum housing, the Teltonika Networks RUT360 is easy to install and is more than suitable for any venue Smyze would operate in.

Beyond speeds of up to 300Mbps with Carrier Aggregation and industrial-grade quality, the RUT360 also offers a number of flexibility and reliability features critical for this solution. It allows for direct integration of Smyze's VPN for it to gain remote access to all deployed units. In addition, the device boasts WAN Failover and Port Forwarding, making it an extra reliable choice for this application.

With the help of the RUT360 at its core, the Smyze Robobarista is able to serve an average of 100 drinks per hour – all with low maintenance costs and minimized personnel expenses.