FX30, powered by Python

Overview

M2M Connectivity has made Sierra Wireless' iconic FX30 Programmable IoT Gateway available with a new Python Runtime Environment (PyRTE) – developed in Australia. In response to increasing demand for Python-based IoT data applications - FX30, powered by Python - is now ready to be deployed.

The powerful package makes it faster to roll out the FX30, and using Python, gives users access to increased functionality using Python-community modules and libraries.

Whether you are creating an IoT project, reporting to portals or interacting with sensors, actuators, and accessories, Python inherently reduces development time.

Key features and benefits of FX30, powered by Python:

- Install & play: No need to rebuild Linux or customise firmware

- Faster development: With virtual testing and configuration on PC - transferable to the embedded FX30

- Python support: Open to include new Python modules such as Modbus

- Easier deployment: In-built radio management for ease

- Integrated: Seamless Sierra Wireless Legato integration and device management.

We have designed the Python Runtime Environment with ease-of-use and speed of deployment in mind. By using the FX30, powered by Python, we have created a powerful package which removes the headaches of IoT deployment for developers and engineers.

About the FX30

The Sierra Wireless FX30 LTE Cat M1/NB-IoT modem (or the LTE/3G variant) is an industry leading, small, rugged and programmable cellular gateway. It provides an integrated, secure embedded application environment, tightly integrated with the cloud, that enables swift, scalable and global deployments of IoT applications for any connected machine or infrastructure.

Key Features:

- Global & scalable: Reach the global 3G/2G market with a single product, and scale to LTE with full hardware and software compatibility

- Highly programmable: Enables secure Linux-based embedded application environment to build efficient IoT systems

- Small & rugged: Purpose-built to fit into machines and infrastructure equipment, and meets harsh industrial environmental requirements.

About Python Runtime Environment (PyRTE)

M2M Connectivity's new Python Runtime Environment has been developed by our highly-skilled software engineers with a focus on ease of use and deployment.

Using PyRTE, the FX30 is now:

- Quicker to market: Easier to test and configure using Python-based virtual environments on globally certified hardware

- Future proof: Simpler to expand with Python modules and libraries

- User friendly: Data analsysts can use the same language across device and server side

- Easier to integrate: Access to off the shelf backend portal connectors written in Python

- Full-fledged gateway: Easy to bridge short range RF such as BLE, mesh, 6LoWPAN to 4G with failover to Satellite

- Smarter: Edge computing is possible.

Technical overview – FX30 powered by Python:

- 4G CAT M1 support enabling long-life span to 5G

- Standard Python3.5+ with most popular modules supported

- PC-based development in Python environment

- No embedded programming skills needed

- Runtime wrapped as standard Legato application installer – no need to rebuild Linux or customise firmware

- Connection Manager as standard to manage complex radio interactions.