

Device Connectivity

Intelligent Device Connectivity and Real-time Data Acquisition for the IoT Edge

The IoT edge is a complex and highly fragmented environment. A growing number of vendors supply a huge number of different sensors and devices that produce data using an ever-increasing variety of communication protocols. The devices themselves are becoming more and more intelligent, but it is always extremely challenging to connect and seamlessly communicate with these devices in an efficient and business-scalable way.

IOTech's Device Connectivity software greatly simplifies the work required to connect to and communicate with different devices and sensors at the IoT edge. It presents a large set of easy-to-use device connectors that support fast and efficient data flow from the devices to edge and cloud platforms.

IOTech Device Connectivity Key Benefits:

Configuration not coding to save time and effort

IOTech device connectors require only a simple configuration in order to connect to a specific device and begin to receive data. Each device connector has an easy-to-follow set of steps to onboard a new device, with no coding required. This capability reduces device integration effort enormously

Tooling to make device onboarding even simpler

IOTech provides advanced tooling that makes the device configuration and onboarding process even simpler. The tools have protocol-specific steps that make it straightforward to produce a configuration profile for each edge device that you want to connect

Smart Connectivity for the Intelligent Edge

Each connector is embedded with advanced software mechanisms that make them smart. At the point data is collected, it can be filtered and transformed based on specific user requirements. The smart connectors can also be dynamically injected with user-defined analytics and pluggable algorithms so device control can be achieved right at the connector level

Long list of connectors with SDKs to easily create more

The device connectors provided by IOTech already cover a large number of popular edge protocols. They are implemented using high-quality SDKs in C and Go-Lang programming languages. The SDKs can be used to easily create additional connectors, or you can ask the IOTech Professional Services team to help create any new connectors you may need

Delivering Real-time data to Edge Xpert, Edge Xrt and also third-party platforms

IOTech's family of device connectors are utilized by IOTech's Edge Xpert and Edge Xrt edge computing platforms to provide the data ingestion needed for those platforms. However, the connectors can also be used to ingest data in real-time and deliver it to other or third-party edge and cloud computing platforms. The connectors can be delivered standalone, have minimal platform requirements, and can be easily configured to deliver data northbound via their MQTT export mechanisms



Based on tried and tested open-source software

IOtech builds on device connectivity technology that comes from a large and active open source community. The Linux Foundation's EdgeX Foundry open source project defines a device connectivity layer that IOtech has enhanced and productized to make advanced, robust and highly-performant device

IOtech Supported Device Connectors

IOtech provides support for easily connecting to edge devices via a large number of common OT protocols. Each device connector is delivered as a low footprint microservice that can be used for fast and efficient data flow to either Edge Xpert or Edge Xrt.

Please refer to the list below and contact IOtech for details of each protocol and the features that are supported.

Supported Southbound Connectors:

