TOSHIBA

Remote Monitoring
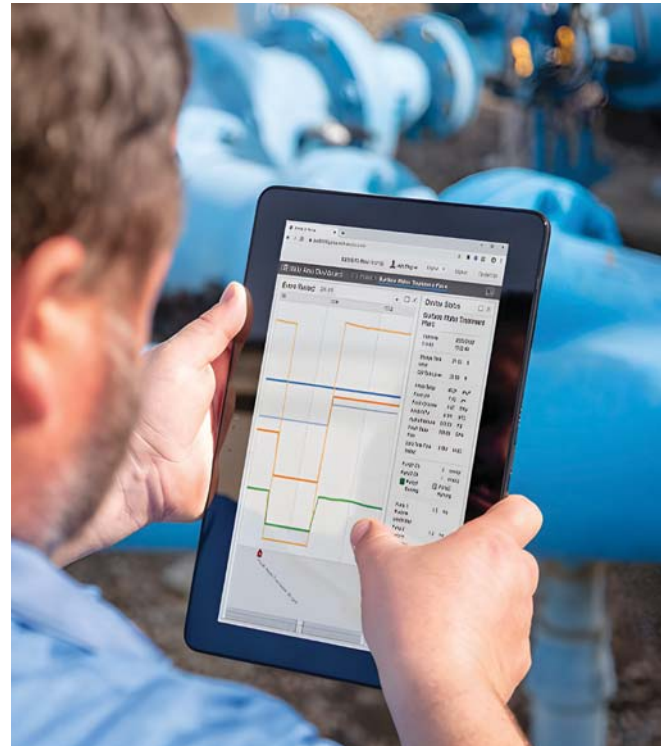## The First Step in IoT Implementation

Type 1 PLC Series
& IoT Solution Pack

SEAMLESS INTEGRATION

Gain visibility and insight into facility operations with remote monitoring using Toshiba's Type 1 Light PLCs and IoT Solution Pack. Enhance performance and decrease cost by monitoring equipment performance, detecting abnormalities sooner, and improving resource utilization. Deployment is facilitated through Toshiba's comprehensive hardware and software solutions. The integration of technology enables optimal communication and translation of data to the cloud in a secure environment. A clear and actionable dashboard provides a wealth of near-real-time operational data and customized reporting assists in optimizing productivity, increasing accuracy, and minimizing downtime with Toshiba's industrial comprehensive solutions.

HARDWARE + SERVICE = INNOVATIVE SOLUTIONS

Type 1 Light PLC
Programmable logic controller captures data generated from devices throughout the facility.

Cloud
Remote servers allow monitoring, visualization, and control of the asset from internet-connected devices.

Dashboard & Analytics
A user intuitive dashboard delivers a wealth of near real-time visibility into operations remotely. Custom actionable reports assist in process improvement, cost reduction, and increased operational efficiency.

Quick to configure
Why wait months or more to connect operations and facilities? IoT Solution Pack can have you up and running faster than you can imagine.

Cloud-based for lower cost-of-entry
There is no need to build out a complex IT infrastructure to accommodate Toshiba IoT Solution Pack. It operates on the cloud, which lowers cost of entry and makes scaling very cost effective.

Simple to use
Toshiba IoT Solution Pack is engineered to offer a simple, intuitive user experience with screens that make it easy for you and your people to see what's happening, to react and optimize operation.

Easily expandable
IoT Solution Pack not only gives basic connectivity, visualization and insight, but it also helps gather the data needed to create more complex and cognitive analytic modules by using Toshiba's APIs.

TOSHIBA

Dashboards—Where KPIs Come to Life

Digital dashboards with dynamic graphics provide critical information based on KPIs. They're the most effective way to visualize device and process status, events, and basic analytics.

KPIs deliver the data necessary to achieve your business objectives, including:

- Temperature
- Turbidity
- Vibration
- Flow rates
- Speed
- Motion
- Pressure
- Substance levels

Type 1 Light Programmable Logic Control

The high performance and robust processing power of the Type 1 Light PLC seamlessly handles intricate industrial processes. The ample Input/Output (I/O) capacity accommodates a diverse range of sensors and actuators, facilitating the precise control of interconnected devices, including pumps, compressors, and flow meters. It effortlessly integrates into the gateway and cloud-based monitoring of Toshiba's IoT Solution Pack. The Type 1 Light PLC offers versatile programming capabilities, supporting the international standard programming language IEC 61131-3. It's scalability and expandability cater to evolving operational needs, while its favorable total cost of ownership, enhances its appeal. Type 1 Light PLC is backed by Toshiba's commitment to exceptional support and a sterling industry reputation.

Type 1 Light S
CPU module: PUM11
Program capacity: 32K steps
Number of I/O connections: Up to 32 External I/F: Ethernet RS485 (computer link protocol) USB (for programming & monitoring)

Type 1 Light H
CPU module: PUM12
Program capacity: 64K steps
Number of TC-netTM I/O connections: Up to 64
External I/F: Ethernet USB (for programming & monitoring)

Type 1 Light D
CPU module: PUM14
Program capacity: 128K steps
Number of TC-netTM I/O connections: Up to 192
External I/F: Ethernet, USB (for programming & monitoring)
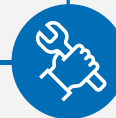
Gain operational visibility quickly

Detect issues before they become problems
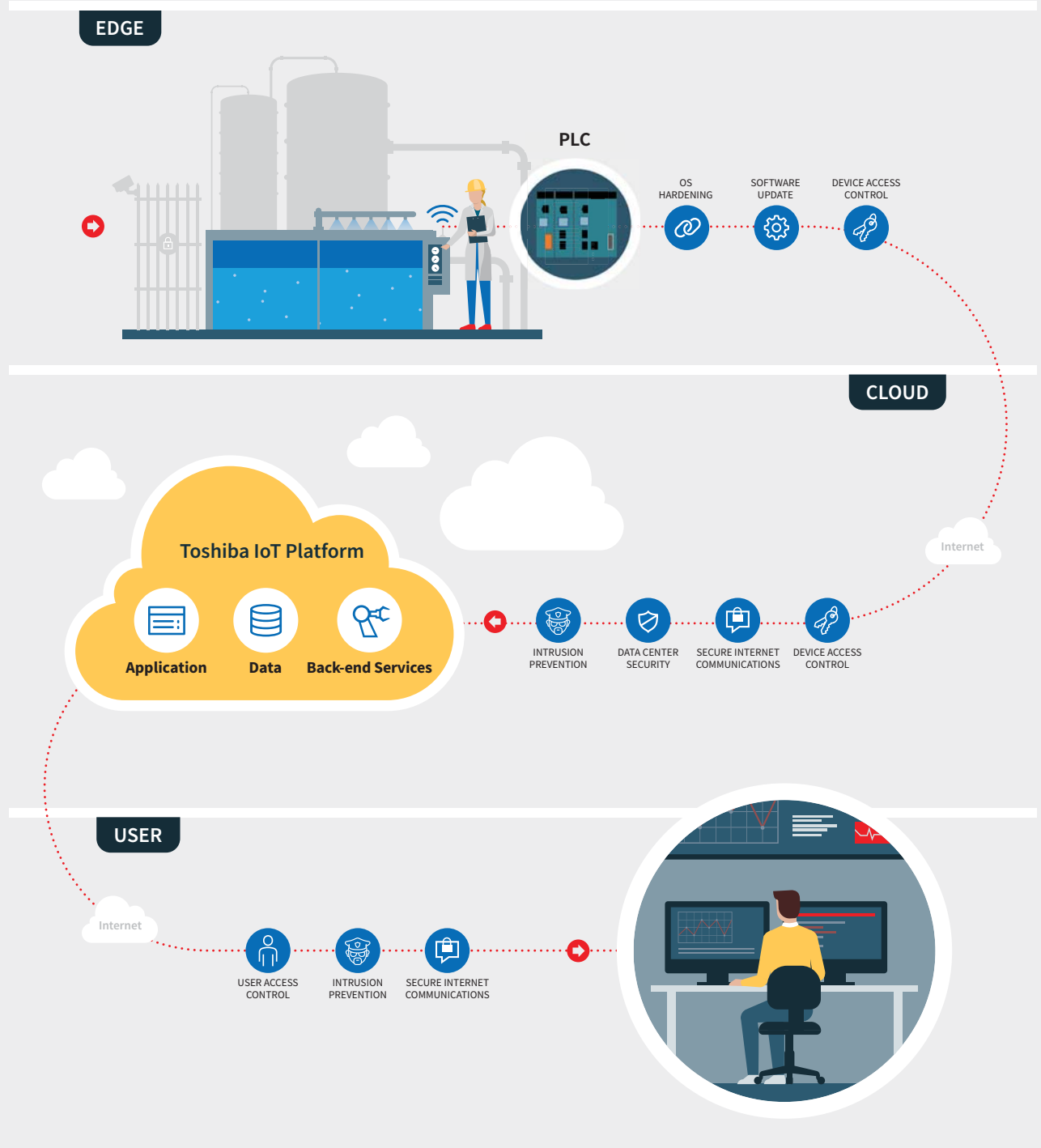
Boost productivity

Reduce costs and downtime

Create new value and services

TOSHIBA

A Multi-Layered Security Approach

Toshiba's PLCs and IoT Solution Pack boslter overall network security. It addresses key areas of vulnerability across the IoT infrastructure - at the edge (on-site computing infrastructure), in the cloud, and in the user environment.

EDGE

PLC

OS HARDENING

SOFTWARE UPDATE

DEVICE ACCESS CONTROL

CLOUD

Internet

Toshiba IoT Platform

Application

Data

Back-end Services

INTRUSION PREVENTION

DATA CENTER SECURITY

SECURE INTERNET COMMUNICATIONS

DEVICE ACCESS CONTROL

USER

Internet

USER ACCESS CONTROL

INTRUSION PREVENTION

SECURE INTERNET COMMUNICATIONS

TOSHIBA MOTORS & DRIVES
Adjustable Speed Drives • Motors • Motor Controls • Instrumentation

www.toshiba.com/tic

TOSHIBA