IIoT Gateway Starter Kit

Edge computer and data acquisition software evaluation package

> **Ready-to-deploy UC-8112-LX edge computer, with ThingsPro Gateway software pre-installed**
> **ThingsPro Gateway features:**
> • **Easy-to-use web UI for Modbus DAQ, MQTT connectivity, and wireless communication for efficient edge-to-core data transformation**
> • **RESTful APIs and Modbus APIs for implementing all ThingsPro Gateway software functions**
> **The UC-8112-LX features:**
> • **LTE-ready computer with Verizon/AT&T certification and industrial-grade CE/FCC/UL certifications**
> • **Open platform design that supports the Linux Kernel 4.1 with Debian 8**

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﹕ Overview

The IIoT Gateway Starter Kit combines the ThingsPro Gateway software package with the UC-8112-LX edge computer, providing you with a great tool to boost your Industrial IoT prototype development.

With the IIoT Gateway Starter Kit, you can achieve a faster time to market, and develop IIoT applications better suited for your customers' needs.

ThingsPro Gateway Software

Moxa's ThingsPro Gateway is a groundbreaking software package designed for Industrial IoT applications. It bridges the gap between IT (Information Technology) and OT (Operational Technology) by offering an easy-to-use web UI for Modbus DAQ, LTE connectivity, and MQTT communications. With ThingsPro Gateway, you can focus on software application development for your Industrial IoT business. ThingsPro Gateway supports a number of useful software functions and provides a Modbus API and RESTful API for future software integration and enhancement.

More information: https://www.moxa.com/doc/specs/ThingsPro_Gateway.pdf

UC-8112-LX Edge Computer

The UC-8112-LX industrial-grade RISC-based edge computer may be tiny, but it has everything you need for field-site deployment. It packs a 1 GHz ARM processor, 512 MB RAM, two LAN ports, and two serial ports into a compact, rugged, palm-sized box. It also supports a wide range of wireless accessories to add LTE or Wi-Fi connectivity if needed. Following the industry trend of implementing distributed-grid and smart-manufacturing designs, industrial-grade computers add essential field-site intelligence for RMAC (Remote Monitoring And Control), Intelligent Data Logger, Software-based RTU, and Protocol Converter applications. The UC-8112-LX's open platform design supports Debian 8, and the Linux Kernel is based on Moxa's SLTS (Superior Long Term Support) Linux Kernel v4.x to ensure that your software assets will be useful for longer than would otherwise be possible.

More information: https://www.moxa.com/doc/specs/UC-8112-LX.pdf

MOXA®

: Ordering Information

IIoT Gateway Starter Kit

UC-8112-LX-STK: UC-8112-LX edge computer development kit with ThingsPro Gateway software (ThingsPro-GW) pre-installed
Note: Maximum of two orders per account

Package Checklist

- UC-8112-LX edge computer
- ThingsPro Gateway: ThingsPro-GW software package (pre-installed in the UC-8112-LX)
- Console cable
- Power jack
- Power adapter
- Quick installation guide (printed)
- Warranty card

: Optional Accessories

Power Adapters, Power Cords, Console Cables

Model Name	Package Contents	Description
PWC-C7US-2B-183	Power Cord x 1	Power cord with 2-pin connector, USA plug
PWC-C7EU-2B-183	Power Cord x 1	Power cord with 2-pin connector, Euro plug
PWC-C7UK-2B-183	Power Cord x 1	Power cord with 2-pin connector, British plug
PWC-C7AU-2B-183	Power Cord x 1	Power cord with 2-pin connector, Australia plug
PWC-C7CN-2B-183	Power Cord x 1	Power cord with 2-pin connector, China plug

Wireless Package

Model Name	Package Contents	Description
CELLULAR-LTE-US	• Cellular module x 1 • i-PEX MHF to SMA adapter with cable x 2 • Screw sets x 1	LTE regions: North America (compatible with LTE/US, HSPA, GPRS/ GSM, and GPS) LTE: B2, B4, B5, B13, B17, B25 UMTS/HSPA+: B1, B2, B4, B5, B8 GNSS (GPS+Glonass)
CELLULAR-LTE-EU	• Cellular module x 1 • i-PEX MHF to SMA adapter with cable x 2 • Screw set x 1	LTE regions: Asia, Europe, Australia, New Zealand (compatible with LTE/EU, HSPA+, GPRS/GSM, and GPS) LTE: B1, B3, B7, B8, B20 UMTS/HSPA+: B1, B2, B5, B6, B8 GNSS (GPS+Glonass)
WiFi-BGN	• WiFi module x 1 • i-PEX MHF to RP-SMA adapter with cable x 2 • Screw set x 1 • ANT-WDB-ARM-02 WiFi antenna x 1	WiFi Package

Antennas and Internal Antenna Cables

Model Name	Package Contents	Description
ANT-GPS-OSM-05-3M	Active GPS antenna, 26 dBi, 1572 MHz, L1 band antenna for GPS	GPS Antenna
ANT-3G-SMA	SMA male antenna for cellular; supports bands 850/900/1800/1900/2100 MHz	3G Antenna
ANT-LTE-OSM-03-3m BK	Multi-band antenna that covers 700-2700 MHz; specially designed for 2G, 3G, and 4G applications; magnetic mounting available	4G Antenna
ANT-LTE-ASM-04 BK	LTE Stick antenna that covers 704-960/1710-2620 MHz; provides omnidirectional radiation with a 4.5 dBi gain	4G Antenna
ANT-LTE-ASM-05 BK	LTE stick antenna that covers 704-960/1710-2620 MHz, with a 5 dBi gain	4G Antenna
ANT-LTE-OSM-06-3m BK MIMO	Multi-band antenna that covers 700-2700/2400-2500/5150-5850 MHz; screw-fastened mounting and full IP67 waterproofing available	4G Antenna
ANT-WDB-ARM-02	RP-SMA male antenna for WiFi; supports the 2.4 GHz band.	WiFi Antenna
A-CRF-MHFSF	i-PEX MHF (male, on cellular module) to SMA (female, on top cover) adapter with cable; for installing a GPS antenna or second cellular antenna	Cellular antenna cable
CRF-MHF/SMA(M)-14.2	i-PEX MHF (male, on cellular module) to RP-SMA (female, on top cover) adapter with cable; for installing a second WiFi antenna	WiFi antenna cable

Mounting Kits

Model Name	Package Contents	Description
WALLMOUNT-8100-01	Wall-mounting kit with screws	Wall-mounting Kit