

IloT Gateway Starter Kit

Moxa's Arm-based industrial computer preinstalled with ThingsPro® data-acquisition software



- > Ready-to-deploy UC-8112-LX edge computer, with ThingsPro® Gateway software preinstalled
- > 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 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



Introduction

The IloT 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 IloT Gateway Starter Kit, you can achieve a faster time to market, and develop IloT 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 Arm-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 Ethernet 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 Superior Long-Term Support (SLTS) 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>

Ordering Information

IloT Gateway Starter Kit

UC-8112-LX-STK: UC-8112-LX edge computer development kit with ThingsPro Gateway software (ThingsPro-GW) preinstalled

Note: Maximum of two orders per account

Package Checklist

- UC-8112-LX edge computer
- ThingsPro Gateway: ThingsPro-GW software package (preinstalled 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Wi-Fi module x 1 • i-PEX MHF to RP-SMA adapter with cable x 2 • Screw set x 1 • ANT-WDB-ARM-02 Wi-Fi antenna x 1 	Wi-Fi 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 Wi-Fi; supports the 2.4 GHz band.	Wi-Fi 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 Wi-Fi antenna	Wi-Fi antenna cable

Mounting Kits

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