



frequently asked
QUESTIONS

ICX35-HWC Industrial Cellular Gateway

What is the ICX35-HWC Industrial Cellular Gateway?

The gateway provides secure wireless Ethernet and serial connectivity to remote devices over 4G LTE cellular service with fallback to 3G.

I'm trying to make the most efficient use of my time and money. How can the gateway help?

By monitoring and troubleshooting your equipment from anywhere in the world, you can avoid most costly and time-consuming maintenance visits. This also helps you minimize unscheduled downtime and increase your productivity. Our gateway supports SMS messaging, enabling your EtherNet/IP™ controller to send commands to your equipment, ensuring that any issues are handled as soon as possible. In addition, you can monitor all of your gateways through ProSoft Connect™, ProSoft Technology's secure, cloud-native platform for the Industrial Internet of Things. This intuitive Web-based interface can be used anywhere you have access to an Internet connection. You can sign up and take a tour at <https://prosoft.io>.

Why is this type of solution better than a wired connection or a radio?

It solves the problem of connecting to remote devices when other means are not possible because of a variety of factors, including: the cost of trenching; obstructions preventing wireless signals that require line of sight; and distance to remote locations.

What are some typical applications that may require an Industrial Cellular Gateway?

Connecting to remote devices for programming, monitoring, and alarms; I/O control (start/stop motors; open and close gates/valves; turning on alarm); and diagnostics are a few applications that benefit from an Industrial Cellular Gateway. The industries served include Oil and Gas, Water/Wastewater, Mining, OEM machine monitoring and control, and many others.

Why should I use a gateway with LTE instead of 3G?

LTE is the latest cellular technology in use today and offers greater application longevity than 3G does. Many cellular carriers are planning to phase out 3G networks over the next few years, leaving 3G only devices in the dark.

I have an ICX30. Can its configuration be exported to the ICX35?

No. The ICX35 takes advantage of newer technology that makes the configuration incompatible with the ICX30.

Can the ICX35 operate on Verizon networks?

The ICX35 is now certified for use on Verizon networks. Following are additional frequently asked questions pertaining to ICX35 operation on the Verizon network:

Do I need a different model of ICX35 to work on Verizon?

No, the ICX35-HWC-A supports Verizon and GSM-based networks like AT&T.

Do I need to configure the ICX35 differently to work on Verizon?

Yes, the ICX35 must have Verizon-specific radio software loaded in order to work on the Verizon network.

Can I order ICX35 gateways with Verizon-specific radio software already loaded?

Yes. There are two ways to do this. The first option is to order the Verizon conversion option. When placing your order to ICX35-HWC-A gateways, you can also order the Verizon conversion option ICX35-VZW. For each ICX35-VZW option ordered, we will install the Verizon radio software on one of the ICX35-HWC-A units, and add identifying labels to the unit and the package to indicate that it contains the Verizon radio software.

The second option is to order a Verizon activation or data plan through ProSoft. When placing your order for ICX35-HWC-A gateways, you can also order a Verizon 2 year data plan (RLXIC-VZW-250M-24 for 250MB/month, or RLXIC-VZW-5G-24 for 5GB/month) with a Verizon custom activation (RLXIC-ACT). For each data plan and activation ordered, we will load Verizon radio software on one ICX35-HWC-A, label the unit and package, and activate your data plan. You do NOT need to add the ICX35-VZW Verizon conversion option in this case.

Can I load the Verizon-specific radio software on ICX35s I already have?

Yes, the radio software can be updated by the user. See the user manual for details.

What ICX35 firmware level is required?

ICX35 Firmware Version 1.3.0 and later support Verizon connectivity.

If I decide to switch from Verizon to a GSM based carrier, can I convert my ICX35 back to the GSM version radio software?

Yes. Use the procedure outlined in the user manual.

I have an ICX30 with Verizon service. What do I need to do to replace the ICX30 with an ICX35?

The ICX30 is a 3G only device, and does not use a SIM card when used on the Verizon network. Verizon LTE devices, like the ICX35, require SIM cards even for 3G service. Therefore, you must first obtain a SIM card from your provider, and convert your plan over to that SIM card. If you

purchased your data plan through ProSoft, [contact ProSoft](#) for details on converting the plan from the ICX30 to the ICX35.

Does SMS messaging work on the Verizon network?

Yes, the SMS messaging function in the ICX35 works with the Verizon LTE network. Note, however, that the data plan you buy must include SMS service. Many LTE data-only plans do not include SMS, so be sure to specify with your provider if you need SMS. Data plans provided by ProSoft include unlimited SMS.

I will use my ICX35 in the US and other countries. Can I use Verizon in this case?

ProSoft Technology does not recommend using Verizon in this case, as you will need to convert the radio software when you leave the US. In this case, it is better to use a GSM based network like AT&T.

What is the difference between “radio software” and “ICX35 firmware”?

ICX35 firmware is the core firmware running on the ICX35, and applies to all radio types. This firmware can be updated through the ICX35 web server interface, or through ProSoft Connect. The radio software applies only to the radio module within the ICX35 and defines how the radio module interacts with the cellular tower that it connects to. This software can only be updated through the ICX35 web server interface, according to the directions in the user manual.

Why would I select Verizon over AT&T or other carriers?

In the U.S., there are multiple cellular service options available to customers. The choice of carrier depends on several factors, including strength of coverage in the intended use area and availability of corporate rate plans. The ICX35 now supports both CDMA-based carriers like Verizon and GSM-based carriers like AT&T, so you are free to choose the best carrier for your specific needs.

Will the ICX35 work on a Verizon private network?

Yes, the ICX35 is compatible with Verizon private networks. Note that private networks do not provide internet access for the mobile device. To reach the internet, the ICX35 must be configured to use your corporate network’s internet gateway. If you intend to use ProSoft Connect™ for device management or secure remote access, the ICX35 must be able to reach the internet using SSL (HTTPS). Check with your IT department to determine if internet access can be configured in this case.

Does the ICX35 come with an antenna?

No. The proper antenna depends on the application. ProSoft can help you choose the best antenna for your application.

What antenna options do you offer for the ICX35?

We currently have four LTE antenna options for the ICX35:

Part Number	Description	When to use
A072703S-OA	3dBi direct-mount articulating "stub" antenna	Use when ICX35 is mounted in the open. Do NOT use if ICX35 is mounted in a metal control cabinet.
A072703S-OBH	3dBi Bulkhead Mount Omni antenna with 5' lead	Use when ICX35 is mounted in a control cabinet. The antenna mounts to the outside of cabinet, with a 5-foot (1.5 meter) lead to run to the ICX35.
A072706NJ-OC	6/7dBi Omni mast-mounted collinear antenna with N type connector	Use when location has poor signal strength. This option requires additional cables and connectors, so have a wireless field application engineer review.
A072710NJ-DS	10/11dBi Directional mast-mounted antenna with N type connector	Use when location has poor signal strength. The directional antenna will point at a specific cell tower to improve reception. This option requires additional cables and connectors, so have a wireless field application engineer review.

What other items might be needed for an ICX35 application?

If the antenna is mounted outdoors, we offer a weather-proofing kit to protect all connections from corrosion. We also recommend the use of a lightning protector in outdoor applications. For some antenna and mounting options, extension cables are required. Contact a wireless field application engineer to review the requirements in any of these cases.

Can I use an antenna from another vendor with the ICX35?

Yes. The ICX35 has a Reverse Polarity SMA (RP-SMA) connector for its antenna connections. Any 4G LTE antenna with a RP-SMA connector should work. Note that 3G antennas may work, but may not cover all LTE frequencies. Therefore, we recommend replacing 3G antennas with 4G LTE antennas.

What data plans are available from ProSoft for the ICX35?

ProSoft offers several data plan options for US customers. (No international plans available at this time). ProSoft data plans use industrial rated SIM cards, and offer the convenience of a single PO transaction for 2-year plans. Plans are available on either Verizon or AT&T, so the customer can select which carrier offers the best service in his area. We recommend our 5GB per month plans for most applications,

especially where VPN and/or ProSoft Connect secure remote access will be used. ProSoft also offers plan activation, where we will install the SIM and activate the data plan in the customer's ICX35 before shipment so the unit is ready to go on arrival. Data plan part numbers and details are listed here:

Part Number	Description
RLXIC-ATT-250M-24	2-Year AT&T Data Plan, 250MB/mo data limit
RLXIC-ATT-5G-24	2-Year AT&T Data Plan, 5GB/mo data limit
RLXIC-VZW-250M-24	2-Year Verizon Data Plan, 250MB/mo data limit
RLXIC-VZW-5G-24	2-Year Verizon Data Plan, 5GB/mo data limit
RLXIC-ACT	Plan Activation Service
ICX35-VZW	Convert ICX35 for Verizon use. (Included with purchase of Verizon data plan)

ProSoft data plans are a convenient option for industrial customers who do not want to deal with monthly plan payments, and the hassle of configuring and activating a separate data plan on their ICX35.

Can I use my own data plan?

Yes. The ICX35 works with any 4G LTE or 3G data service. Follow the steps in the User Manual to configure the ICX35 for your service. You will need a Mini-SIM (2FF) card, and some information from your cellular provider to complete the activation. (Note – some carriers like Verizon in the US did not use SIM cards for 3G service. The ICX35 requires a SIM. In these cases, users will need to contact their cellular provider and obtain a SIM for the service to work on the ICX35.)

Can I use a pre-paid data plan with the ICX35?

Pre-paid data plans generally work with the ICX35. These can be a good low-cost option for certain applications. It is important for the user to monitor the balance and keep these plans “topped up” to avoid service disruptions. We do recommend using one of the ProSoft plans or a standard monthly data plan to avoid service disruptions.