ICX30-HWC
Industrial Cellular Gateway FAQ

1. Why did we create the ICX30-HWC?

The ICX30-HWC Industrial Cellular Gateway was created to allow secure wireless connectivity over 3G cellular networks. The industrial cellular gateway is ideal for programming and maintenance, remote data collection, remote access, telematics, /telemetry, location-based monitoring and SCADA applications.

2. What can the ICX30-HWC communicate to?

The ICX30-HWC can connect to most Ethernet or serial devices which include, PLCs, RTUs, DCS systems and many other devices.

3. How do I configure the VPN?

There is an application note on our web site that describes in detail how to create an IPsec VPN connection from modem to modem.

4. What is the reason for having a public IP address?

The main advantage of having a public IP address is accessibility of the modem and attached device(s) from any Internet connection without the need for a VPN (required for private IP address).

5. What security is available from the Ethernet side?

The ICX30-HWC gateways have integrated IPSec VPN capabilities. A VPN tunnel can be set up between two of the ICX30-HWC's. MAC filtering and Port forwarding are also available.

6. Can a GSM (AT&T) modem communicate with a CDMA (Verizon) modem?

Yes, as long as both modems have public IP addresses.

7. What is the minimum signal strength that you would want to see in an application for solid connection?

The modems will work down to about -100dBm but we recommend -90dBm or better.

8. What kind of latency can I expect from PC to PLC with Ethernet or serial?

This will vary quite a bit depending on the speed of connection (GPRS vs. HSPA), loading of the base transceiver subsystem, internet traffic, and carrier. The published specs from AT&T claim 100-200ms for HSPA networks and 600ms for GPRS/EDGE networks.

9. Can you access more than one Rockwell Automation Ethernet device per cell modem?

Yes, but the method used will be different depending on if the devices are the originator or destination of the communication. If the devices are originating the communications then no special setup is required. If the devices being polled or queried, (due to the fixed service port limitation of Ethernet/IP) you must either use a VPN tunnel between modems or create a VPN connection to a VPN box on the destination network side.

10. Can you configured the digital I/O for one input and one output?

The digital I/O can be configured independently, one as an input, the other an output, or both the same.

11. Can this industrial cellular gateway send SMS messages that are generated from an Allen-Bradley PLC?

Yes, this can be done using the AOI and some logic. The built in Digital I/O can also send SMS messages based upon change.

12. What happens if you exceed your data use for the month? Will you get a huge bill or will the data stop?

It depends on the type of plan you have. Some plans automatically bump up your data plan to the next level. Other may just bill you. Your service provider may offers software tools to notify the user if they are approaching a preset threshold. Note that the billing is updated periodically, so some charges could accrue before the update indicates the threshold has been exceeded.

13. Does ProSoft resell data plans to our customers?

Yes, reselling the data service helps provide the entire solution to the customer and offers benefits, particularly for customers without current M2M service. For North America we offer multiple plans from AT&T, Verizon and Rodgers in Canada. For other regions it is usually easier for the customer to obtain this service themselves. If this is not an option we have partnered with Wyless. Wyless is a world wide data provider that customers can directly work with. The contact at Wyless is: Matt Tyre, Tel: 1 (617) 863-3221
Fax: 1 (617) 830-0977 matthew.tyre@wyless.com

14. Can you give me some general cost of service data?

Obviously rates vary greatly depending on carrier and region but some general numbers for U.S. service range from around $10 for 1MB per month to $60-$100 for 5GB per month.

15. What is the power requirement of the modem?

Rated input power is 10-24VDC @ 6W.

16. What are some typical applications?

Many applications are for remote access, remote access can be described as remote programming, diagnostics, telemetry/telematics, troubleshooting or maintenance. Other applications include video/surveillance, leased line replacement, tracking inventory/vehicle (GPS function), signage, and environmental monitoring.