FREQUENTLY ASKED QUESTIONS

Cellular Meter Interface Unit (CMIU™)

How do I know whether I have AT&T or Verizon service in my area?
Both AT&T and Verizon publish coverage maps for their 4G LTE service on their individual websites. Using these coverage maps, identify the locations where the CMIU™’s will be installed and use the coverage maps to determine if AT&T or Verizon has service in that location.

Does the CMIU require any programming?
No, the CMIU auto-detects the type of encoder register it is connected to and shifts automatically to the appropriate mode.

With what encoder registers will the CMIU function?
The CMIU is compatible with the following encoder registers:

- Neptune® ARB® V, ProRead®, ProCoder®, E-CODER®, MACH 10®, and KROHNE WATERFLUX 3070
- Sensus (Invensys) ECR II, ECR III, ICE, iPerl, Electronic Register, and OMNI
- Hersey/Mueller Translator
- Badger ADE and HR E|LCD

Please refer to the latest CMIU product sheet for any updates to the compatibility list.

If I change the register attached to the CMIU, do I need to wait up to an hour to get an updated reading?
No, magnet swiping the CMIU will force the CMIU to interrogate the register and any subsequent readings will contain the latest reading from the new register.

What are the various modes of operation for the CMIU?
Basic – hourly data delivered every 24 hours
Advanced – hourly data delivered every 4 hours
Pro – 15-minute data delivered every 1 hour

Does the CMIU support RF-activated consumption activity history like the R900®?
No, the CMIU does not support RF-activated consumption activity. However, the CMIU is capable of storing up to 96 days of reading data to backfill readings in the event of a cellular network interruption. Once communication is restored, any readings that are stored and have not been transmitted will be queued and transferred via the 4G LTE cellular network, so that there are no missed readings.

How is the CMIU activated?
The CMIU is shipped in a “sleep” mode and requires a magnet swipe along the top left corner of the CMIU to activate and begin transmitting meter reading data.

Is the battery replaceable on the CMIU?
No, the CMIU is fully potted for field reliability and there is no mechanism for field replacement of the battery.
The CMIU supports both Verizon and AT&T. Can I use both in my system or can I only choose one provider?
Yes, you can use both in your system if you choose. The delivery and setup of reading data has no bearing on the type or cellular carrier chosen.

How can I distinguish a Verizon CMIU from an AT&T CMIU?
All Verizon CMIUs have a starting MIU ID of 4 and all AT&T CMIUs have a starting MIU ID of 5. Further, the label will indicate which version and includes a blue or red box to help identify the CMIU. A blue box on the label indicates an AT&T CMIU and a red box on the label indicates a Verizon CMIU.

How do I change the mode of operation for the CMIU?
You can change the mode by using the System Commands function within Neptune® 360™ You will need to know the CMIU ID to complete the mode change operation. Note: Changing the mode of operation impacts battery life and will retroactively change the warranty based on the mode of operation that is selected.

What is the expected life of the CMIU?
The CMIU includes data for up to ten (10) years of data service. However, note that changing to Advanced or Pro modes will decrease the expected life of the CMIU. For more information, please refer to the CMIU warranty statement.

Can a CMIU be connected to two (2) separate encoder registers?
No, the CMIU does not support networking and can only be connected to a single encoder register.

How do I download and install the CMIU Manager to my iOS device?
Contact Customer Support to obtain a license key and directions for installing the application to your iOS device.

How can the CMIU Manager assist with installation and troubleshooting?
The CMIU Manager is an iOS application that communicates with the CMIU via Bluetooth link to display information on cellular network status of the CMIU and meter reading information of the connected register. This displayed information can be used to verify that you have properly wired the CMIU to the attached register along with a verification of cellular signal strength at the installation location.

Is the CMIU Manager required for installation?
No, the CMIU Manager is not required for installation and is simply a tool to be used for your convenience to verify a valid meter reading and cellular network status while at the installation location.

Why is the CMIU transmitting all colons (::::::::)?
The CMIU is not detecting an encoder register. Check all wiring connections and magnet swipe the MIU to force a register interrogation.

What is the difference in label colors on the CMIU device and CMIU pit antenna?
The CMIU supports two different cellular network providers: AT&T and Verizon. The blue label color signifies an AT&T device and a red color signifies a Verizon device. In order to ensure you are using the proper pit antenna, verify that the CMIU pit antenna label color and CMIU label color match. This will ensure that you are using an AT&T pit antenna with an AT&T CMIU or a Verizon pit antenna with a Verizon CMIU.

Can an AT&T CMIU pit antenna be used with a Verizon CMIU pit antenna and vice versa?
No, each antenna is specifically designed for each cellular network. Both the pit antenna and the CMIU contain color-coded labels so that you can confirm you are connecting a Verizon CMIU with a Verizon pit antenna or an AT&T CMIU with an AT&T pit antenna. The color code used on the Verizon CMIU and pit antenna is red and the color code used on the AT&T CMIU and pit antenna is blue.
What options exist for delivery of reading data for CMIUs and how is this configured with Neptune’s Managed Services team?
There are three options for delivery of reading data for CMIUs: N_SIGHT PLUS v5.5+, N_SIGHT v4.7+, and Email Delivery of CSV File. Each order should contain the end customer along with a completed CMIU Request Form to Neptune’s Managed Services team with a selection of how the customer wants the CMIU readings data delivered.

If CMIUs are being stocked by a distributor, then the end customer does not have to be assigned at time of order; however, a CMIU Request Form must be completed once CMIUs are allocated and shipped to a specific customer.

The CMIU Request Form can be found on the Resource Center.

How are the CMIUs configured by Neptune’s Managed Services team for the three different delivery options?
With N_SIGHT PLUS v5.5 and above, customers can enter MIU IDs as they would with any other MIU ID using the “Account Management” screen or with an import file from billing. Once the MIU IDs have been entered into N_SIGHT PLUS, you will be able to view reading data in the software application as you would any other MIU ID.

With N_SIGHT v4.7 and above, Neptune’s Managed Services team will create an FTP location for the data to be downloaded and processed by N_SIGHT v4.7 as you would with an earlier version of the R900® Gateway.

With the email delivery of a CSV file, Neptune’s Managed Services team will configure the delivery of a daily or hourly CSV file to a customer provided email address.

Will I need to provide the CMIU configuration information each time I order CMIUs?
No, you only need to provide this information once for the initial setup when purchasing CMIUs for the very first time. Thereafter, Neptune’s Managed Services team will configure CMIUs in the same way their existing CMIUs are configured.

I’m a distributor and would like to stock CMIU inventory. How do I provide the needed information for a customer receiving CMIUs for the first time?
Once you identify and ship CMIUs to the end customer, the CMIU Request Form (which is located on the Resource Center) should be completed and provided to Neptune’s Managed Services team for configuration and setup.