



[www.rodanenergy.com](http://www.rodanenergy.com)  
[info@rodanenergy.com](mailto:info@rodanenergy.com)

# Meter Modernization Program

## Migration from Analog to Digital Communications

Internal 56k analog phone modems used to be the industry standard for revenue meter connectivity. The global migration from analog phone systems to digital cellular communications occurred years ago in all our day-to-day lives. The steady increase in the reliability and robustness of digital cellular networks have made legacy analog phone systems obsolete by comparison.

Coupled with years of repair data that show analog phone ports on revenue meters are the most common failure point, the evidence is overwhelming – now is the time to change.

Going forward, Rodan will be phasing out dial-up as an option for daily revenue meter data polling and replacing with cellular modem access. This replacement is projected to improve the reliability of remote access to the meters, strengthen cyber security, provide faster communications and reduce the cost of our customer's communications infrastructure.



# Benefits of Cellular Modems

## More Robust

In Rodan's experience as a meter service provider, not only are analog phone ports the most common point-of-failure, but the core problems often cannot be repaired. This means that the entire meter needs to be replaced, a more time consuming and expensive process. By comparison, problems with cellular communications cards are much less common.

## More Reliable

Cellular networks such as ethernet and cellular TCP/IP are a more reliable, more secure, and faster means of communications than phone lines. Phone line usage is continuously being phased out across all sectors.

The modems are plug-and-play and pre-programmed with a firewall so that only Rodan can see or access them. Rodan is constantly monitoring modem data usage for anomalies and have automation built in to de-activate SIM cards showing irregular data usage.

## More Stock and Availability

The latest models of Schneider ION meters do not offer a 56k analog phone line port option anymore. It is only older/obsolete, and soon to be obsolete meters, that have this analog option. It is estimated that all meters with internal phone port options will be completely obsolete within the next 5-10 years. Inventory will continue to be depleted and delivery times will increase significantly.

## Improved Accessibility

To receive fast, remote support and troubleshooting on a meter, device files must be downloaded to assess the condition. When remotely accessing a meter over phone line, download connections often drop out, making remote support and troubleshooting difficult (and in some cases, impossible).

Cellular modems provide Rodan with a dedicated connection to field meters, a connection that is fully isolated from a site's private local area network (LAN). The meter ports are electrically isolated ensuring that the remote connection cannot impact the site communications in any way - a cybersecurity best practice.

In addition, overall troubleshooting of cell modems is easier from a data control perspective since additional assistance from the phone company or on-site technicians would not be required.

## Save Money

In addition to the higher indirect costs of phone lines previously described, cellular modems also provide direct cost savings. The monthly charges for phone lines are more expensive than cell modems. This advantage increases when considering that several meters on a site can share a single cell modem (distance permitting) and interrogate meters simultaneously.

