ALLEGRO® CELLULAR





Allegro Cellular is Master Meter's cuttingedge AMI solution that harnesses the power of IoT to revolutionize water management. By leveraging existing cellular networks, we deliver a robust, secure, and cost-effective platform for collecting and transmitting meter data. Experience accelerated digital transformation without the complexities of infrastructure deployment.

Designed with unparalleled flexibility, Allegro Cellular can operate as a standalone Network-as-a-Service (NaaS) or seamlessly integrate with your existing AMI infrastructure. Our versatile endpoints are compatible with virtually any meter model, simplifying the transition to smart water management. Rapid deployment and immediate network connectivity provide the full spectrum of benefits associated with traditional fixed solutions, minus the hefty investment in network infrastructure.

Features & Benefits:

- No Infrastructure Required Allegro Cellular utilizes existing cellular networks to transmit meter consumption data, eliminating the need for the City to construct and maintain new communication infrastructure. This translates to significant cost savings, particularly for smaller systems or low-density rural environments looking to implement AMI quickly with minimal upfront investment. Yearly fees apply for cellular network usage.
- Secure Data Transmission: Utilizes secure cellular protocols (3GPP), VPN tunnels, and encrypted radio transmissions for complete data protection.
- Reliable Network Coverage Leverages existing cellular network infrastructure with close to 100% coverage and uptime, providing highly reliable system operation and strong Quality of Service (QoS). Additionally, Cat-M LTE cellular networks boast nationwide coverage (98% of the US) with built-in redundancy for even greater reliability.
- **Robust Technology** Cellular endpoints are not "new technology" as cellular technology has been a part of our everyday lives for decades. Cellular networks are built around incredibly robust, proven technology that used by thousands of different IoT applications across countless industries.



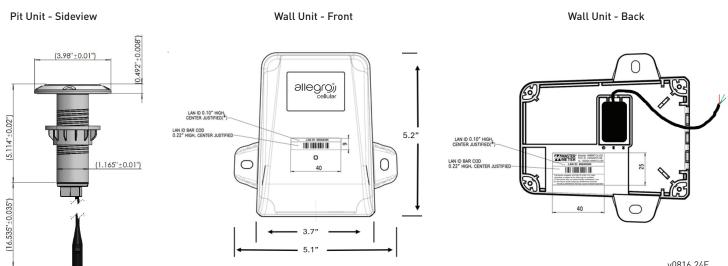
Technical Specifications:

- Technical Parameters With a radiated optimal transmitted power and a frequency range spanning from 2.402 GHz to 2.48 GHz, Allegro Cellular ensures optimal performance across various applications. Specifically engineered to operate seamlessly within AT&T Cat-M LTE Bands 12, 4, and 2, Allegro Cellular guarantees reliable connectivity and an exceptional user experience
- · Housing Both pit and wall mount units utilize high-density ABS polymer enclosures, offering a weatherproof seal to protect internal electronics, power, and radio components from harsh or damp environments. Wall mounts include molded brackets for secure installation on masonry, wood, or any permanent building material.
- Environmental Protection The wall-mount cellular endpoint is IP66-rated for non-submersible, outdoor installations. The pit-mount cellular endpoint is IP68rated for installation and operation in a submersed environment, to provide protection against moisture intrusion and other environmental hazards common in a meter pit installation setting. Electronics are coated for added environmental protection.
- Antenna Both the pit-mount and wall-mount cellular endpoints have an integrated antenna, 3.98" or less in diameter. The pit-mount antenna neck will fit within an industry-standard 1.75" hole in the meter lid with a locking mechanism underneath to secure the device.

- Power Source The wired cellular endpoints are battery operated using a non-replaceable single C-cell Lithium Thionyl Chloride battery designed for a long operational life and is fully warranted for 20 years based on one (1) transmission per day. Please refer to Master Meter's Consolidated Warranty.
- Intelligent Encoder Detection The cellular endpoint can automatically detect and communicate with industrystandard 3-wire encoded meters (manufactured within the past 10 years), requiring no additional programming. The unit will determine the appropriate protocol based on meter interrogation.*
- Data Logs and Alarms Allegro cellular endpoint offer advanced data logging capabilities, storing a maximum of 5,760 data points (60 days of 15-minute reads) and providing on-demand access to this data, including logged events for alarms like Cut Wire, Low Battery, Leak, CCW, and Burst, via MDM user command or compatible Bluetooth-enabled field applications.
- Activation The cellular endpoint arrives in storage mode and activates during installation using a magnet. After activation, the cellular endpoint connects to the cellular network once a day (by default).

* Approved encoded registers include Master Meter (Elinx, Acculinx, Sonata, Octave), Badger (HRE, ADE, E Series), Sensus (ECR II, ICE, IPerl, Electronic Register, Omni), Hersey/ Mueller Translator, and 420 Solid State Registers.

Dimensions



v0816 24F