DCAP

Diversity RF
Data Concentration Access Point

Standard and MAX Range Systems

Product Overview

Our DCAP is at the heart of our Automated Meter Reading (AMR) system. It comes in two versions, our Standard and MAX Range. The Standard Range is our original, first generation system, which we continue to fully support and maintain.

The MAX Range DCAP uses Spread Spectrum technology to nearly triple the range of MDTs and Repeaters being received by the DCAP. A powerful embedded micro-computer and our diversity RF radio provide the best performance found in an AMR system.

The DCAP pushes data to the cloud multiple times per hour. Use our CIT software, Web App or Mobile app to connect to the cloud and program and commission a site including MDT Radio IDs to meter mapping, meter serial numbers, installation information and maintenance notes. You can schedule data be pushed by email or FTP/ SFTP or use our API to pull your data.

The DCAP uses Ethernet or WiFi to connect to property Internet, then automatically relays the metering data to a billing company using a standard CSV data format. There is a version of the DCAP with built-in cellular for properties that do not have a designated Ethernet or WiFi connection. This requires a cellular subscription that is $20/ month.

Specifications

Communication Options	• 10/100 Ethernet or WiFi • Cellular modem (Optional)
Communication Protocols	• Email with .CSV or .OUT file • FTP and Secure FTP • API for pulling data reads
Radio	• 902 – 928 MHz; FCC and IC Certified • +28.5dBm transmit power, open field range nearly five miles*
Data Storage	Data forwarded to the cloud multiple times an hour. Local storage up to six months if Internet not available.
Dimensions	6.0" x 5.2" x 1.45"
Operating Environment	-10 to 145 degree F, up to 90% RH, non-condensing
Power	12VDC, 1A via 120 VAC wall transformer
Warranty	Five years. For more detailed information, please visit our warranty page. Note that the warranty does not cover equipment that is not protected by a surge protector or damaged from a power overload.

Continual product enhancements may cause specifications to change without notice.
*Actual range may vary depending on installation location and topography.

Models

The Diversity DCAP ships with 12V DC 1 Amp power supply and Ethernet cable. A separate programming cable (TWA-09) is required for programming WiFi password or setting up a static IP address.

Standard System		
Low capacity DCAP	TW-203X-T-150	DCAP with support for 150 meter points. Includes Radio Receiver.
Standard Capacity DCAP	TW-203X-T-1000	DCAP with support for 1000 meter points. Includes Radio Receiver.
DCAP with LTE Cellular, Low Capacity	TW-203X-TC-150	Diversity DCAP with with embedded LTE Cellular. Support for up to 150 meter points. LTE service contract not included.
DCAP with LTE Cellular, Standard Capacity	TW-203X-TC-1000	Diversity DCAP with with embedded LTE Cellular. Support for up to 1000 meter points. LTE service contract not included.
MAX System		
Low capacity DCAP	TW-205-T-150	DCAP with support for 150 meter points. Includes Radio Receiver.
Standard Capacity DCAP	TW-205-T-1000	DCAP with support for 1000 meter points. Includes Radio Receiver.
DCAP with LTE Cellular, Low Capacity	TW-205-TC-150	Diversity DCAP with with embedded LTE Cellular. Support for up to 150 meter points. LTE service contract not included.
DCAP with LTE Cellular, Standard Capacity	TW-205-TC-1000	Diversity DCAP with with embedded LTE Cellular. Support for up to 1000 meter points. LTE service contract not included.

** Standard and Max Range systems are NOT compatible: only Max Range MDTs must be used with a Max Range Repeater (and Max Range DCAP) and vice versa.

Refer to AN-119 in the documents section of our website for more information.