

Aclara RF Network

Data Collector Unit II (DCU)



The Aclara RF Network Data Collector Unit II (DCU) for water and gas utilities enhances your AMI network by providing reliable and flexible, two-way communications for water and gas meters.

THE BACKBONE OF AN AMI NETWORK

The Aclara RF Network DCU II is the backbone of an AMI network, communicating to meter transmission units (MTUs) over individually FCC licensed 450 to 470 MHz radio frequencies, and to the Aclara RF Network head-end software using a network backhaul of choice. The device communicates over cellular, fiber-optic, Ethernet, Wi-Fi, and WiMAX on public or private networks.

FEATURES AND BENEFITS

- Network design is redundant, ensuring the 98.5% or better read-rate required for billing accuracy
- DCUs are tuned to a unique frequency, minimizing external interference from other sources
- Point-to-multipoint design does not require add-on repeaters or similar devices
- Message encryption, passphrase for DCU console access and DCU door access and tamper notifications offer multiple levels of security
- The DCU transmits meter reads and alarms data to the utility and sends commands back to the MTUs
- Detailed diagnostic data for calls, alarms, system redundancy, location, battery charging current and temperature allows utilities to maintain total control over their system
- Remote firmware upgrades for ease of network management
- Priority reporting of error conditions, data-collector door access, and tamper notifications guarantee that data is accurate and secure
- On-board battery can sustain full operation for up to 8 days during power outages
- Power save mode and memory data retention protects important data indefinitely
- Flexible installation using either solar or AC power to maintain DCU batteries
- DCU stores up to 28 days of hourly MTU reads in the case of a backhaul failure. Stored data is automatically uploaded when the backhaul is restored
- Rugged, weatherproof design installs on poles, rooftops, buildings, or water towers

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DCU SPECIFICATIONS

External enclosure:	316 stainless steel, NEMA 3R
Internal electronics enclosure:	NEMA 4X
Dimensions:	22" h x 14" w x 8.25" d
DCU weight:	55 lbs.
Nominal voltage:	12VDC
Power consumption:	5 watts average
Approval	FCC Part 15 and 90, Industry Canada RSS-119
Seismic	Zone 4
Operating temperature	-40oC to +70oC
Storage temperature:	-40oC to +85oC
Battery:	Nominal power: 12 volts; capacity: 28 A-h
Antenna:	Two 38.4" antennas spaced 48" apart; weight: 10 lbs. 31.3" h x 26.5" w x 2" d; weight: 28 lbs.
Solar Panel Option:	Power output: 65 or 100 watts; nominal power: 12 volts
Cellular Technology:	LTE

