

FlexNet M420D Base Station

High-Capacity Base Station



Flexibility & Scalability

The M420D, with single and dual transceiver options, provides unparalleled scaling opportunities for future smart grid applications.

Features

- GPS receiver for time synchronization
- Duplexer for single antenna
- IP-addressable power supply with hot-swap capability
- 8-hour battery backup
- Alarms and reporting capability
- Backhaul via Ethernet/IP
- Heated battery for cold weather environments
- Modular construction for easy serviceability

The Sensus FlexNet® M420D Base Station offers a strategic network communications option for smart grid deployments with high volume, diverse traffic requirements.

By providing dual M420 transceivers, a single base station can simultaneously support communications for both AMI meter reading systems and high value applications such as DA, DR, and HAN, while transmitting and receiving in a 250 kHz band of spectrum. This bandwidth enables more dedicated channels and higher network traffic capacity, allowing the M420D to take full advantage of the Sensus FlexNet communication network and its primary-use licensed spectrum that delivers eight times the transmit power of competitive smart grid communication systems.

Configuration and Performance

With both single and dual transceiver shelves available, the M420 meets performance demands for today and the future. When configured with two transceivers, up to sixty-four receivers and two transmitters may be supported, each transceiver dedicated to an individual smart grid application.

The M420D includes system alarm monitoring, next generation encryption, and supports DA, DR, and HAN applications.

Available configurations include:

- Indoor cabinet
- Outdoor cabinet
- Combined
- Sectorized

The M420D offers a replacement for the following configurations:

- Drop-in for a M400D chassis
- Drop-in for a S100/S50 transceiver shelf (size 3U)
- Transceiver swap out for a M400G2 transceiver only in any M400D chassis or M400B2 cabinet



Applications

- Two-way Advanced Meter Infrastructure (AMI)
- Distribution Automation (DA)
- Demand Response (DR)
- Home Area Networks (HAN)
- RNI 4.x or newer
- NCS 2.x
- Unified 3.x
- Micro Grid and Grid Edge

Installation

As the smallest dual-transceiver base station offering from Sensus, the M420D provides flexible indoor, pole or pad-mounting options that enable strategic deployment, a discreet appearance, and low-cost installation. The modular transceiver shelf allows for rapid and flexible upgrade paths to fit a variety of dual-application needs.

Enclosures

Properties	Indoor - Cabinet	Outdoor - Pole/Pad Mount
Cabinet height	Short: 48" (122 cm) or Tall: 84" (213 cm)	37" (94 cm), 49" (124 cm) with pad mount
Cabinet width	24" (61 cm)	22" (56 cm)
Cabinet depth	28" (71 cm)	25.5" (65 cm)
Cabinet weight	325 lbs.	300 lbs. (approx.) with one M420D shelf installed
Temperature	-40° to +122° F (-40° to +50° C) (enclosure dependent)	-40° to +131° F (-40° to +55° C)
Voltage	120 VAC	120 VAC
Battery backup	8 hours	8 hours
NEMA rating	12 (indoor cabinet)	4

Properties

Receive bandwidth	250 KHz per M420 transceiver
Transceivers	Single, Dual
Spectrum	Licensed 900 MHz PCS/MAS
Duplexing	Single/Dual transmit Thirty-two/Sixty-four receivers
Applications	Single/Dual
Expandability	Yes (shelf and frame level)
Compatibility	SNMP
Shelf height	5.25" (13.3 cm) 3U
Shelf width x depth	19" (48.3 cm) x 11" (27.9 cm)
Shelf Capacity	Two M420 transceivers per 3U shelf
FlexNet compatibility	RNI 4.x or newer Unified 3.x or newer NCS 2.x or newer

Xylem
639 Davis Drive
Morrisville, NC 27560

Tel +1 800.638.3745
xylem.com

xylem.com/sensus

xylem