

Add a 3G cell modem communication module to your BaseStation irrigation controller to enable reliable remote connectivity. The cell modem sends and receives data over a wireless carrier's 3G network. Baseline's 3G cell modems have the following technical specifications.

Supported Frequency Bands

GSM/GPRS/EDGE: 850/900/1800/1900 MHz
UMTS/HSPA+ (WCDMA/FDD): 800/850/900/1900/2100 MHz
CDMA2000 (BC0, BC1, BC10 subclass 2+3): 800/1900 MHz

Maximum Connectivity Speed

HSPA+: 14.4 Mbps (Cat 10) down, 5.76 Mbps (Cat 6) up

Rx Diversity

Simultaneous equalization and Rx diversity on all bands, except GSM/GPRS/EDGE

Power & Communication

Power is supplied to the cell modem by the rear 5-pin terminal block on the right end of the controller board on all BaseStation 3200 or BaseStation 1000 irrigation controllers.

The controller and cell modem communicate over an Ethernet cable.

The cell modem is configured through the irrigation controller's interface.

DC Power In: 9-33 V DC

Current Consumption: 341mA (measured at 12V DC)

Network

Cell modems operate on a wireless carrier's network and require a yearly data fee.

Baseline provides the SIM card from the wireless carrier and a 1-year subscription to a data plan with the wireless carrier.

Environment

Operating: -22° to +158° F (-30° to +70° C)
Storage: -40° to +185° F (-40° to +85° C)
Humidity: 5% to 95% RH noncondensing

General Information

Dimensions: 4.5" W x 4.1" L x 1.8" D (11.5 cm W x 10.5 cm L x 4.5 cm D)
RF Antenna Connector: WWAN SMA female
Ethernet (IEEE 802.3): 10/100Mb/s RJ45 connector
SIM: USIM/SIM connection, Class B and Class C
Status Indicators: Seven 3-color LEDs showing system status and signal strength
Standards Compliance: RoHS, REACH
Certification: FCC, PTCRB

Security

The cell modem uses one of the following ciphers for encryption

- 128-EEA1 SNOW 3G based algorithm
- 128-EEA2 AES based algorithm

If the cell modem is on Baseline's private network, there is additional encryption (AES 128-GCM) between the wireless carrier's network and the Baseline server.

Compatible BaseStation Firmware

The following firmware versions have integrated support for 3G cell modem communication:

BaseStation 1000: Version 1.11 and higher

BaseStation 3200: Version 12.17 and higher

Compatible BaseStation Hardware

BaseStation 1000: All controllers in X cabinets and pedestal (P) enclosures

BaseStation 3200: Controllers in X cabinets and pedestal (P) enclosures shipped after
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