# ACCESS360
## ConnectBridge™ Network Controller & Wireless Gateway

**CTC CONNECT**



## Product Features

Used for connecting CTC Connect compatible products to a TCP/IP network. Can support MQTT IoT Protocol and a WebSocket Connection for data transfer.

Receives data from CTC Connect devices and facilitates bi-directional transfer of data.

Unlimited Sensor Inputs* – Mix and Match ConnectSens™ WS100, WS200 and WS300 Sensors in Any Quantity



4.10 in [104.0 mm]
3.64 in [92.4 mm]
2.50 in [63.6 mm]
4.24 in [107.8 mm]
7.14 in [181.4 mm]

### Stock Product

*The ethernet cable backshell for ACCESS360 is built to accomodate an industry standard RJ45 Ethernet connector. Any strain relief on the connector cannot exceed a width of 7/16 in. (11.1 mm).

## Component Specifications

| | |
|---|---|
| **Input** | Bluetooth® signals from CTC ConnectSens™ wireless sensors |
| **Output** | Gigabit ethernet with IEEE 802.3af PoE |
| **Wireless Communication** | Bluetooth® Low Energy 5.2 |
| **ISED ID** | 21201-ACCESS360 |
| **FCC ID** | 2BKLG-ACCESS360 |
| **Storage** | 4 GB dedicated, with pre-installed 32 GB SD card (removable and expandable) |
| **Material** | Polycarbonate |
| **Compatible Sensor** | Any CTC Connect devices, and compatible sensors related to them |
| **Power** | 48 VDC PoE Injection (IEEE 802.3af or above) |
| **Power Consumption** | 1 W |
| **Minimum Supply Voltage** | 40 V |
| **Input Count** | Unlimited* |
| **IP Rating** | IP67 |
| **Temperature Range** | –4 °F to 158 °F (–20 °C to 70 °C) |

*The access point can accept up to 20 concurrent connections. Using more than 20 connectable sensors is allowable, but may lead to increased data acquisition time.

## Available Data Analysis

Available for ConnectSens™ WS200 and WS300 dynamic capture sensors

Peak Calculations

RMS Calculations

Peak-to-Peak Calculations

FFT Calculations*

Overall Amplitude Trends

Temperature Trends

*FFT properties are dependent on sensor configuration. FFT calculations cannot be configured

### Calculated FFT Properties:

| Sensor Configuration | | | Resulting FFT Properties | | |
|---|---|---|---|---|---|
| Sampling Frequency | Number of Samples | Total Reading Duration (s) | Fmax | Lines of Resolution | Frequency Resolution |
| 400 Hz (24000 CPM) | 1600 | 4 | 200 Hz (12000 CPM) | 800 | 0.25 |
| | 3200 | 8 | | 1600 | 0.125 |
| 800 Hz (48000 CPM) | 1600 | 2 | 400 Hz (24000 CPM) | 800 | 0.5 |
| | 3200 | 4 | | 1600 | 0.25 |
| | 6400 | 8 | | 3200 | 0.125 |
| 1600 Hz (96000 CPM) | 1600 | 1 | 800 Hz (48000 CPM) | 800 | 1 |
| | 3200 | 2 | | 1600 | 0.5 |
| | 6400 | 4 | | 3200 | 0.25 |
| | 12800 | 8 | | 6400 | 0.125 |
| 3200 Hz (192000 CPM) | 1600 | 0.5 | 1600 Hz (96000 CPM) | 800 | 2 |
| | 3200 | 1 | | 1600 | 1 |
| | 6400 | 2 | | 3200 | 0.5 |
| | 12800 | 4 | | 6400 | 0.25 |
| | 25600 | 8 | | 12800 | 0.125 |
| 6400 Hz (384000 CPM) | 1600 | 0.25 | 3200 Hz (192000 CPM) | 800 | 4 |
| | 3200 | 0.5 | | 1600 | 2 |
| | 6400 | 1 | | 3200 | 1 |
| | 12800 | 2 | | 6400 | 0.5 |
| | 25600 | 4 | | 12800 | 0.25 |
| | 51200 | 8 | | 25600 | 0.125 |
| 12800 Hz (768000 CPM) | 3200 | 0.25 | 6400 Hz (384000 CPM) | 1600 | 4 |
| | 6400 | 0.5 | | 3200 | 2 |
| | 12800 | 1 | | 6400 | 1 |
| | 25600 | 2 | | 12800 | 0.5 |
| | 51200 | 4 | | 25600 | 0.25 |
| | 64000 | 5 | | 32000 | 0.2 |
| 25600 Hz (1536000 CPM) | 6400 | 0.25 | 12800 Hz** (768000 CPM)** | 3200 | 4 |
| | 12800 | 0.5 | | 6400 | 2 |
| | 25600 | 1 | | 12800 | 1 |
| | 51200 | 2 | | 25600 | 0.5 |
| | 64000 | 2.5 | | 32000 | 0.4 |

**Fmax exceeds mechanical sensor resonance