

# Wireless Temperature Transmitter

OMWT-TEMP15  
Starts at  
**\$137**



- ✓ Transmits Up to 180 m (600')\*
- ✓ 64-Bit Unique ID
- ✓ Up to 100 Sensors Can Coexist
- ✓ Compact ABS Enclosure
- ✓ Complies with Part 15 of FCC Rules
- ✓ Internal Loop Antenna

The OMWT-TEMP15 wireless temperature transmitter is a battery-operated digital temperature sensor with a microprocessor or controlled 418 MHz FCC certified radio transmitter. The OMWT-TEMP15 has an on-board time of day clock that allows it to spend most of the time in a low-power quiescent state. At pre-determined time intervals, the clock will wake up the on-board microprocessor. Unique serial number information and digital temperature data are read from a digital temperature sensor. This information is combined with a CRC-16 error check and transmitted in a very short data packet that results in a transmitter "on" time of only 15 milliseconds. This architecture allows the OMWT-TEMP15 to consume very little energy, resulting in a battery life of up to 3 years.

The electronics are coated with a conformal rubber material that provides a moisture barrier against condensation. Submersion in water is not recommended. A hole in the top ABS cover permits a special tool to be inserted to activate the service switch. The device is shipped with the transmitter turned off (anytime the device is to be shipped, the transmitter should be turned off; otherwise, it must be placed in a shielded container to prevent interference that might cause shipping problems). The unit is started by pushing the service switch (the user feel the button click).

When the service switch is pushed, a data transmission immediately



OMWT-TEMP15, \$137, shown larger than actual size.

OMWT-SOFT, \$100, displays real-time historical chart or numerical data



occurs, and a special mark is placed in the ID field of the transmitted data packet to indicate which device is in service or installation. The service switch is also used to put the device in a quiescent mode (no transmissions and very low power consumption). This is the state the device is in when the user receives it. Push and hold the service switch for 10 seconds or more to enter this powered-down state.

With the OMWT Series Windows software, incoming data being received from OMWT Series wireless transmitters can be viewed in a real-time, historical time-based chart or in a numerical view. High/low alarms can be set for each transmitter signal, with either a visual or audible alarm indication on the PC. Data can also be logged to disk at a user-specified rate in a text file format that can be opened into Microsoft Excel. The OMWT Series Windows software includes a DDE server that can interface the data being received from OMWT Series wireless transmitters to other Windows software packages.

## Specifications

- Transmission Frequency:** 418 MHz
- Transmission Range\*:** Up to 180 m (600') depending on environmental conditions
- Transmission Rate:** 10 to 17 seconds random
- Accuracy:**  $\pm 0.5^{\circ}\text{C}$  ( $\pm 0.9^{\circ}\text{F}$ )
- Operating Temperature:**  $-10$  to  $85^{\circ}\text{C}$  ( $-18$  to  $185^{\circ}\text{F}$ )
- Storage Temperature:**  $-40$  to  $85^{\circ}\text{C}$  ( $-40$  to  $185^{\circ}\text{F}$ )
- Humidity:** 10 to 90% RH non-condensing
- Battery:** 3.6 V lithium battery (included)
- Battery Life with Transmissions:** 3 years
- Shelf Life with Battery Installed:** 5 years in quiescent mode
- FCC Certified:** FCC ID: M5ZCNT
- Dimensions:** 38 H x 53 W x 15 mm D (1.5 x 2.1 x 0.6")
- Weight:** 43 g (1.5 oz)

**AVAILABLE FOR FAST DELIVERY!**

To Order (Specify Model Number)		
Model No.	Price	Description
OMWT-TEMP15	\$137	Wireless temperature transmitter
OMWT-REC232	222	Wireless receiver and 1.8 m (6') RS-232 cable with DB9F termination
OMWT-SOFT	100	OMWT Series Windows software (WIN95/98/NT/2000/XP)
OM-NOMAD-BATT	12	Replacement 3.6 V lithium battery
CS-3774	75	Reference Book: Introduction to Microcontrollers

Comes with complete operator's manual.

\* Depending on environmental conditions.

**Ordering Example:** OMWT-TEMP15 wireless temperature transmitter, OMWT-REC232 wireless receiver and OMWT-SOFT Windows software, \$137 + 222 + 100 = \$459.