



## WX-14 Operating Specifications and Informational

POWER:	117VAC with furnished AC/DC power supply or 12 to 24VDC
SIGNAL TYPE:	19200 baud OQPSK Viterbi Encoded at 1692.7 MHz Carrier Frequency
ANTENNA:	Custom 1692.7 MHz, Center Feed, Parabolic Grid Reflector
ANTENNA MOUNT:	2" Mast, Tripod or Rectangular NPR
RECEIVER:	Two piece – NEMA packaged LNA ar feed horn and indoor receiver unit interconnected with 75 to 250' of RG-6 cable (75' furnished standard). Single conversion in indoor receiver unit. <i>This eliminates frequency drift with temperature which frequently occurs with outdoor conversion systems.</i>
TEMPERATURE:	Outdoors electronics                    -40 to +85 C° (-40 to 185 F°) Indoor electronics                        0 to +70 C° (32 to 158 F°)
TUNING:	Tune frequency is adjustable via firmware; however, for receiving the EMWIN N signal, the receiver tune frequency is set at 1692.7 MHz. The receiver utilizes a direct-conversion tuner IC which is designed for satellite set-top and VSAT applications. The device includes an LNA and an RF variable-gain amplifier, I and Q down converting mixers, and baseband low pass filters with programmable cutoff frequency control and digitally controlled baseband variable-gain amplifiers. Together, the RF and baseband variable-gain amplifiers provide more than 80dB of gain control range.
LNA GAIN:	25dB
LNA NOISE FIGURE:	1.7dB
RECEIVER GAIN:	70dB Typical
RECEIVER OUTPUT:	DB9 Connector. This port provides Serial RS232, 19200 baud, no flow control, Always on.  USB B Connector, Two way communication combines receiver control and status communications data with EMWIN data. PC software may utilize this port for status monitoring and control as well as EMWIN data. A software application interface protocol document is available upon request. Data is always on.  RJ45 Connector. The Ethernet option provides a TCP connection. Factory default IP Address is 192.168.0.50. There are two ports associated with this IP address. Port 7002 is for Control and Status. Port 7003 is for EMWIN Data. There may be two simultaneous connections to each port.
SOFTWARE:	WX-14 Software may be used for receiver monitoring and control and has an EMWIN Data Engine for data quality monitoring.