## Model 195Ea Specifications

| LED Indicators |  |
| :---: | :---: |
| Power On/Off | Receiver On/Off |
| Carrier Detect On/Off | Transmitter On/Off |
| Link Status On/Off |  |
| I/O Connectors |  |
| Ethernet 10/100Base T | RJ-45 |
| RS-232C Programming/Data Port | RJ-45 |
| Dual Antenna input/Outputs | TNC Reverse Female |
| Remote Input Power | Power Over Ethernet Cable |
| Direct Input Power | Optional, Header Screw Connector |
| Transmiter |  |
| Frequency of Operation | 5.745 to 5.825 GHz Software Selectable in 17 Channels |
| RF Data Rates | 6 to 54 Mbps (8 steps) |
| Tx Peak Output Power | 250 mW to 1 Watt (Pk) (4-levels) |
| RF Output Impedance | 50 ohms |
| Receiver |  |
| Rx Sensitivity | $-72 \mathrm{dBm} @ 54$ Mbps to $-92 \mathrm{dBm} @ 6$ Mbps Frame Error Rate <10\% |
| Power |  |
| Power over Ethernet | IEEE 802.3at Power Supply, 48 VDC @ 30 Watts |
| Power Connector on Unit | 10 to 28 VDC |
| Receive | 250 ma @ 12 VDC |
| Transmit | 1.25 A @ 12 VDC |
| Case |  |
| Dimensions | 1.9 in. H $\times 6.7$ in. W $\times 6.2$ in. L |
| Weight | 1.25 lbs . |
| Outdoor Pole Mounting Kit | Optional, EST P/N 195PM |
| Other |  |
| Warranty | 1 Year |
| Temperature Range | $-30^{\circ}$ to $+60^{\circ} \mathrm{C}$ |
| Humidity | 95\% Non-condensing |
| FCC Type Acceptance | Pending |
| Industry Canada Type Acceptance | Pending |

## Model 195Ea Case Specifications



## Antenna Specifications

Model: AA20DMEa
Applications: Model 195Ea direct case mount
Antenna Type: Omni-Directional, Sleeve dipole
Frequency: 5.735 to 5.835 GHz
Polarization: Vertical
Impedance: 50 ohms
Gain: 4.5 dBi ( 2.5 dBd )
VSWR: < 1.5:1
Power: 10 W
Front To Back Ratio: n/a
Horizontal Beamwidth: n/a
Vertical Beamwidth: n/a
Antenna Material: Polyurethane Plastic Radome
Recommended Mounting Hardware: n/a
Antenna Connector: TNC-R Male
Flexibility: +/-20
Antenna Envelope: 7.36 in. length by .51 in . width
Temperature: -20 to $+65 \mathrm{C}^{\circ}$

## Caution

To comply with the FCC exposure compliance requirements, a separation distance of at least $\sim 113$ cm must be maintained between the antenna and all persons.

Model No: AA20Ea
Antenna Type: Omni Directional, DC Grounded
Applications: Fixed base
Frequency: $5.725-5.825 \mathrm{GHz}$
Polarization: Vertical
Impedance: 50 ohms
Gain: $6 \mathrm{dBi}(8 \mathrm{dBd})$
VSWR: 1.5:1 Typical
Vertical Beamwidth: 6 degrees @ $1 / 2$ power
Recommended Mounting Hardware: Pole Mounting Bracket, Supplied
Antenna Connector: TNC male reverse polarity with
18 in. pigtail and weatherproof boot
Maximum Power Input: 25 Watts
Wind Survival: 125 mph
Antenna Envelope: 20.2 in. L x 1.25 in.
Equivalent Flat Plate Area: . 06 sq. ft
Lateral Thrust at Rated Wind: 5.2 lbs feet
Radome: White UV resistant fiberglass
Weight: 0.5 lbs .


## Antenna Specifications

Model No: AA205Ea
Applications: Fixed base mounting
Antenna Type: Directional, Linear Polarized Panel, DC grounded, Integral Bandpass Filter
Frequency: $5.725-5.875 \mathrm{GHz}$
Polarization: Vertical or Horizontal
Impedance: 50 ohms
Gain: $22 \mathrm{dBi}(20 \mathrm{dBd})$ nominal
VSWR: <1.5:1 nominal
Front to Back Ratio: $\geq 25 \mathrm{~dB}$
Horizontal Beamwidth: 9 degrees @ $1 / 2$ power
Vertical Beamwidth: 9 degrees @ $1 / 2$ power
Antenna Material: White UV Resistant Polypropylene
Recommended Mounting Hardware: Adjustable Mounting Bracket provided for wall mounting or masts between 1 in and 2.75 in. O.D.
Antenna Connector: TNC male reverse polarity with 18 in. pig-tail and weatherproof boot.
Maximum Power Input: 20 Watts
Antenna Envelope: 14.5 in . length by 14.5 in . height by 1.75 in . depth


Model AA205Ea
Operating Temperature: -40 to +85 F .
Weight: 3.5 lbs .

## Caution

To comply with the FCC exposure compliance requirements, a separation distance of at least $\sim 113$ cm must be maintained between the antenna and all persons.

