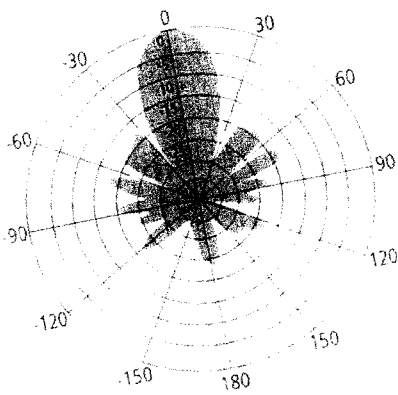
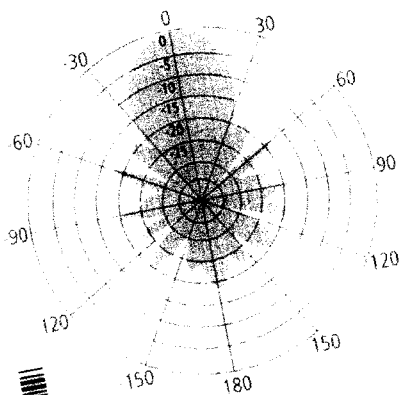


VAGI™

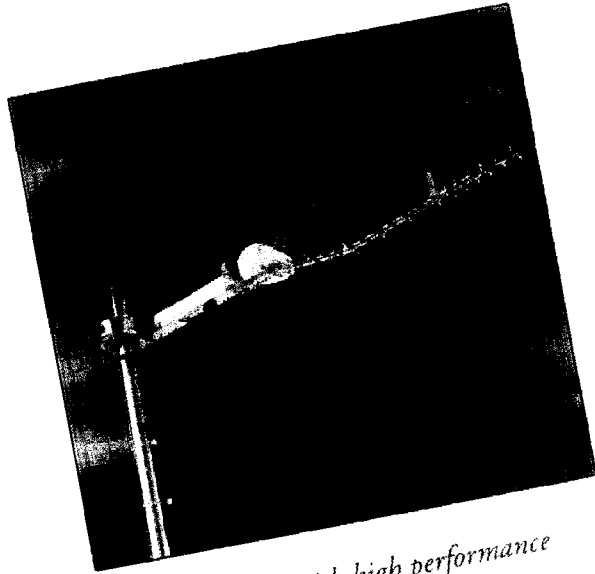
### VAGI Antenna Patterns



VAGI™ Vertical  
2593 MHz



VAGI™ Horizontal  
2593 MHz



*Low profile with high performance*

#### Low Profile

The VAGI™ is a low profile antenna that has been allowed by many homeowner's associations with CC&R restrictions.

#### High Performance

The wider beamwidth, lower sidelobe level performance is exceptional in heavy foliage environments. Additionally, the VAGI™ has all the advantages of the integrated downconverter including the industry's lowest noise figure.

#### Rugged Rustproof Design

A rustproof, cast aluminum construction is used for the antenna portion of the product.

#### Easy to install

The VAGI™ comes fully assembled in an individual box for easy installation and distribution. PM's improved quick mount system facilitates faster mounting and provides tilt capability for installations close to the transmitter.



# 31 Channel Filtered Integrated VAGI™ Downconverter/Antenna PM3182i

## Typical Operating Specifications

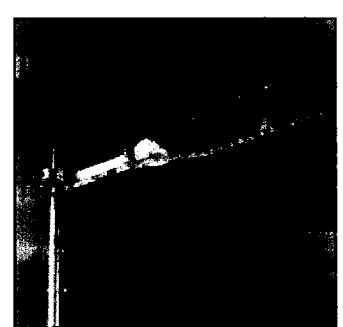
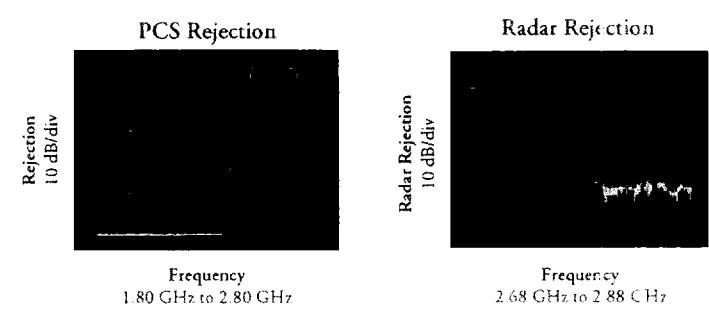
| Parameter              | Minimum | Recommended | Maximum | Units |
|------------------------|---------|-------------|---------|-------|
| Input Frequency (MMDS) | 2500    |             | 2686    | MHz   |
| Output Impedance       |         | 75          |         | ohms  |
| Operating Temp. Range  | -40     |             | +60     | °C    |
| Humidity               | 0       |             | 100     | %     |
| Input Voltage          | 12      | 15          | 24      | V     |

## Typical Electrical Performance

| Parameter                                   |             |
|---|-------------|
| Gain  | 50 dB       |
| Gain Flatness (1 ch)                        | ±0.2 dB     |
| Gain Flatness (31 ch)                       | ±1.5 dB     |
| Noise Figure                                | 1.5 dB      |
| Image Rejection                             | >80 dB      |
| Minimum PCS Rejection<br>(1930 to 1990 MHz) | >95 dB      |
| IF Rejection                                | >80 dB      |
| Spurious in IF Band                         | <-90 dBm    |
| Interference (Radar) Rejection              |             |
| @ 2720 MHz                                  | 10 dB       |
| @ 2760 MHz                                  | 30 dB       |
| @ 2800 MHz                                  | 50 dB       |
| IMD (2-tone test)*                          | -50 dBc     |
| Max Output (31 ch)                          | 29 dBmV/ch  |
| LO Frequency Set                            | 2278 MHz    |
| LO Freq. Stability Over Temp.               | ±35 KHz     |
| LO Phase Noise @ 10kHz offset               | -90dBc/Hz   |
| Output Frequency (MMDS)                     | 222-408 MHz |
| Input Current                               | 200 mA      |

| Antenna Specifications      |        |
|-----------------------------|--------|
| Antenna Gain                | 18 dBi |
| Antenna Front to Back Ratio | 25 dB  |
| Antenna Side Lobe Levels    | 18 dB  |
| Antenna Cross Polarization  | 30 dB  |

| Mechanical Specifications |                       |
|---------------------------|-----------------------|
| Mounting                  | Ultrasonically Welded |
| Mounting Hardware         | Stainless Steel       |
| Mounting Bracket          | Quickmount, 0° to 45° |
| Length                    | 24 in.                |
| Width                     | 4 in.                 |
| Height                    | 3 in.                 |
| Weight                    | 1.5 lb                |
| Finish                    | Flat Silver Alodine   |



Typical values at +25°C.  
1 Measured with two tones 0 dBm output.  
2 Contact factory for other LO frequencies.

Pacific Monolithics products are covered under one or more of the following US Patents: 5,280,412; 5,301,081; 5,317,291; 5,357,229; D347,437; D 363,288; D361,067; D361,068; other patents pending. Specifications subject to change without notice. Copyright Pacific Monolithics, Inc. 1998