

Product Specifications

High Gain Low Cost MAG Series Integrated MMDS/ITFS Downconverters

Now MMDS system designers and engineers can reduce installation budgets with a product designed to operate in demanding of RF environments, while also protecting the LNA from the inevitable introduction of new interfering services. The new MAG Series of MMDS downconverters uses a "filter first" approach for pre-LNA protection against PCS, WCS, and radar services. Unwanted interfering carriers are filtered out before they reach the first amplifier stage in the circuit, preventing the amplifier from being overdriven and allowing use in areas previously not available. The Hi-Q style filtering offers superior discrimination at the lowest insertion loss. MAG series integrated MMDS downconverters are directly matched to an antenna, allowing full RF integration. The antennas are either Conifer's 18dB or 26dB Mag Grid Series of S-band products. The downconverters are compatible to multiple modulation schemes, including 64/256 QAM, and are available in a variety of amplifier gains. Superior lightning suppression has been incorporated into the design providing for long field time life expectancy.



18T-6032 Shown

Features and Options

- Very Low Cost
- Pre-LNA filtering
- Digital compatibility
- Superior discrimination
- Mount Fits ALL Conifer Grid Antennas
- On Board Lightning Protection

Ordering Information

| Type # | Antenna Type | LNA Filter | Amplifier Gain |
|-------------------|---------------------------------|------------|----------------|
| MAG18-6032 | 18dBi Mag Grid Parabolic | Yes | 32dB |
| MAG18-6036 | 18dBi Mag Grid Parabolic | Yes | 36dB |
| MAG26-6032 | 24dBi Mag Grid Parabolic | Yes | 32dB |
| MAG26-6036 | 24dBi Mag Grid Parabolic | Yes | 36dB |
| DC-6032 | None | Yes | 32dB |
| DC-6036 | None | Yes | 36dB |

**Note: Power Supply Not Included, Order Separately
SPECIFICATIONS SUBJECT TO CHANGE

Conifer Wireless
8220 East Gelding Drive
Scottsdale, AZ 85260, USA
Phone 480-315-1501
www.coniferusa.com



Product Specifications

MAG Series Integrated MMDS Downconverters

Model Type XX-6032*

Model Type XX-6036*

| Parameter | Specification |
|--|--|
| RF Input Frequency | 2500 to 2686 MHz |
| IF Output Frequency | 222 to 408 MHz |
| LO Frequency | 2278 MHz \pm 15 KHz |
| LO Frequency Stability | \pm 30 KHz (-40°C to 70°C); |
| Gain (Converter) | 32dB or 36dB, (Depending on Model) |
| Gain Flatness | \pm 3.0 dB, \pm 0.5 dB/6 MHz |
| Noise Figure | 1.7 dB Typical |
| Phase Noise | -93 dBc/Hz @ 10 KHz |
| PCS Rejection (1930-1990 MHz) | 90 dB (40 dB pre-LNA) |
| RF to IF Filtering: | |
| @2450 MHz | 35dB |
| @2750 MHz | 25dB |
| @2800 MHz | 45dB |
| IF Rejection | -80 dBc |
| IMD | -50dBc (with -1dBm output, 2-Tone Test) |
| In Band Spurious/Harmonics | -80dBm |
| 3 rd Order Intercept Point | 24dBm |
| Maximum Output Level: w/31 Channel Load | 35dBm/Channel |
| Group Delay | \pm 10 ns. over any 6 MHz |
| Dynamic Recovery Time | 5 μ sec. (after input overload of +20 dBm @ 1 μ sec. pulse width) |
| Output Connector | Type F Female, 75 Ω |
| Lightning Suppression | Transient Suppressor |
| Supply Voltage | +16 to +24 VDC (through input connector) |
| Current | 235 mA |
| Operating Temperature | -40°C to +70°C |
| Weatherproof Housing | Die Cast, 100% Leak Tested |
| Finish | Chem. Film Conversion; MIL-C-5541, Class 3, Clear |
| Physical Dimensions (less antenna bracket) | 3.0 x 4.0 x 11.6 in., (76 x 102 x 300 mm) |
| Weight | 9.5 oz., (260 grams) |

CUSTOM FREQUENCY PLANS AVAILABLE ON REQUEST

*where xx is antenna prefix

**33 channel versions available upon request (6 MHz/channel)

PS-1341: 120 VAC power supply

PS-2342: 220 VAC power supply

Prices and Specifications Subject To Change

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