



The RDA Series FM receivers cover frequencies from UHF to C-band. Pre and post detection filters with the selection of up to 4 data rates are available as well as NTSC or PAL analog video de-emphasis with up to two metadata subcarriers. The RDA is designed to handle analog and digital signals in the same unit.

Its optimized design provides minimum size, weight and power consumption enabling deployment in virtually all platforms. The RDA is used in conjunction with the TD series transmitters for a complete solution.

**KEY FEATURES:**

- Low Cost, Size, Weight and Power (SWaP)
- Ruggedized and Compact
- RS-232 Monitoring and Control
- Multiple Data Rates and Subcarriers
- Qualified on Multiple Programs
- Deployed on Numerous Platforms

## RDA Receiver



### RDA SPECIFICATIONS

#### RF

<b>Frequency</b>	50 kHz (or larger) steps over 15% bandwidth from 400 MHz to 6 GHz
<b>Frequency Select</b>	Via serial (RS-232 or RS-422) or parallel
<b>Frequency Stability</b>	± 20 ppm over environment
<b>Noise Figure</b>	5 dB maximum
<b>Input Impedance</b>	50 ohms, 2:1 VSWR maximum
<b>IF Bandwidth</b>	Up to 4 bandwidths from 0.5 to 36 MHz, user specified
<b>Dynamic Range</b>	80 dB minimum

#### DIGITAL DATA OUTPUT

<b>Sense</b>	Positive
<b>Output Level/Impedance</b>	Up to 5 V p-p into 50 ohms (adjustable), user specified
<b>Mod Frequency Response</b>	10 Hz to 10 MHz ± 3 dB, up to 4 post-detection filter bandwidths
<b>RSSI Output</b>	0 to +5 VDC via 1 k-ohm resistor

#### ANALOG VIDEO OUTPUT

<b>Output Level/Impedance</b>	1 V p-p into 75 ohms (adjustable), NTSC or PAL
<b>Mod Frequency Response</b>	6 Hz to 5 MHz ± 1 dB with de-emphasis
<b>Subcarriers</b>	Up to 2 subcarriers for Metadata, 5 to 9 MHz center frequency, up to 256 kb rate

#### DC POWER

<b>Input Voltage</b>	+12 to +20 VDC @ 0.4 amperes maximum
<b>Reverse Polarity</b>	Protection to -40 VDC

#### MISC

<b>Size and Weight</b>	3 x 5 x 1.5", 25 ounces maximum
<b>RF Input</b>	SMA Female
<b>DC Power/Log Amp Out</b>	DT02H-8-4PN or DT02H-12-10PN
<b>Data Out</b>	BNC Female
<b>Frequency/Rate Selection</b>	MDM9S (RS-232), or MDM15S (parallel)
<b>Operating Temperature</b>	-20 to +70°C baseplate
<b>Vibration</b>	20 g rms, 3 axes
<b>Shock</b>	100 g, 11 milliseconds, 3 axes
<b>Acceleration</b>	100 g, 3 axes
<b>Humidity</b>	Up to 95%, non-condensing
<b>Altitude</b>	Unlimited