

# VHF DM-3425 UHF DM-3415

DESIGN SUPPORT

Easy Integration

MACHINE TO MACHINE

SCADA

WIRELESS DATA COMMUNICATION

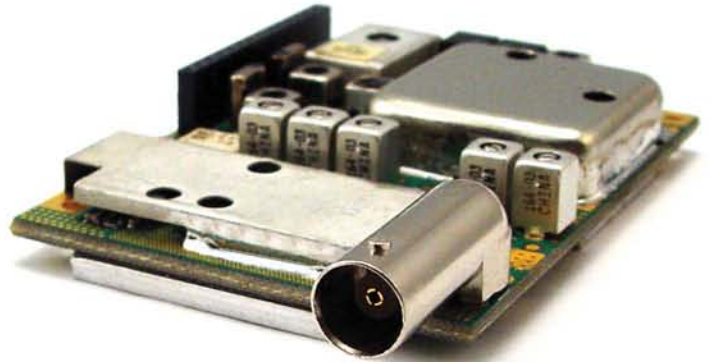
Remote Telemetry

OEM MODULE

PROCESS CONTROL

LICENSED CONNECTIVITY

LONG DISTANCE COVERAGE



Available in UHF and VHF, the Dataradio DM-3415/25 RF Telemetry Modules from CalAmp delivers reliable, easy-to-integrate links to market your product in today's wireless communications arena. Designed specifically for licensed frequencies to minimize interference, these modules provide greater communication distances.

### Performance

These modules provide the foundation for maximum performance in licensed bands. Featuring programmable 0.5 - 5 Watt power output for better power control, an EEPROM stores factory default values and a memory map allows users to add additional information.

### Dependability

The DM-34X5 RF platform will provide the best RF link for your product's success throughout the technological life of the design. Give your product the RF architecture designed from over 25 years of successful innovation.

### Integration and Design Support

Our Developers Kit enables integration and design support to quickly get your product to market. As always, our OEM products come with a standard 2-year warranty.



# DM-3415 /25 Specifications

Pin	Function	Description
1	Ground	GND
2	Primary Power Input	12.5V
3	Transmit Enable	TX_EN
4	Receive Enable	RX_EN
5	EEPROM Data	EE_DATA
6	Transmit Data Input	TX_MOD_IN
7	Synthesizer Lock Indicator	SYNTH_LOCK
8	Synthesizer Enable	SYNTH_EN
9	Synthesizer Data	DATA
10	Synthesizer Clock	CLOCK
11	Digipot Enable	DE_EN
12	Receive Signal Strength Indicator	RSSI
13	Receive Data Output	RX_DATA
14	EEPROM Enable	EE_EN

## Specifications

### General

Frequency Range	VHF 137-174 MHz; UHF 406-470 MHz
RF Input Impedance	50 Ohm
Frequency Control	Synthesized
Channel Bandwidth	12.5 kHz
Frequency Stability	1.0 ppm DCXO (Digitally Compensated Crystal Oscillator)
Operating Voltage	6 - 15 VDC
RF Connector	BNC (Other Options Available)
Power / Data Interface	14-pin single in-line socket (female), on 100" centers
Operating Temperature	-30° to +60° C (-22° to +140° F)
Humidity	0 to 95% (40° non-condensing)
Maximum Dimensions	2.94" L (7.47 cm), 2.20" W (5.58 cm), 0.70" H (1.78 cm)
Weight	2.20 oz max.

### Receiver

Reference Sensitivity	< -116 dBm @ 12 dB SINAD and 1 kHz tone with Psophometric
Receive Current Drain	VHF 70 mA max; UHF 75 mA max
Adjacent Channel Rejection	>60 dB
Spurious & Image Rejection	>70 dB
Intermodulation Rejection	>70 dB
Modulation Response	DC to 2.5 kHz
Modulation Output Level	150 mVrms Nominal

### Transmitter

Conducted Carrier Output Power	Programmable 0.50 Watt to 5 Watts
Bandwidth	24 MHz w/o tuning (150-174 MHz) / 24 MHz w/o tuning (406 to 430 MHz) 25 MHz w/o tuning (137-162 MHz) / 20 MHz without tuning (450 to 470 MHz)
Modulation	Frequency Modulation (FM)
Rx to Tx Lock Time	< 7 mS
Transmitter Stability into VSWR	No failure or instability up to 10:1

## Product Identification

VHF 242-3425-XXX  
137-162 MHz -710  
150-174 MHz -610

UHF 242-3415-XXX  
406-422 MHz -210  
414-430 MHz -211  
450-470 MHz -510



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