

Microwave

MODEL 2423

24.0-24.25 GHz
MILLIMETER WAVE
RADIO LINK



- ▲ Full Motion Video & Two Data Channels
RS-250C Medium Haul Performance
- ▲ Video, PTZ & Data Link
- ▲ FCC Licensing = None
Part 15 Compliant
- ▲ NEMA Temperature Range
- ▲ Two Hour Installation Time
- ▲ Flexible - Two Antennas All Frequencies
- ▲ Low Cost - Fast Payback
- ▲ Low Maintenance - Simple, Compact &
Trouble-Free
- ▲ 2 Year Warranty

The GDI 2423 series millimeter wave radio is a versatile, simple, low cost alternative to a land-line video circuit.

If your requirements are for simplex video for NTSC or PAL with two full duplex data channels, the Model 2423 millimeter wave radio link affords you a low cost radio solution.

Constraints due to cost, response time or right-of-way that you may have with land line implementation you may find the Model 2423 video radio to be quicker, easier and more affordable.

Applications

- Point to point surveillance
- Video interconnection between several sites
- Last mile connections

Technical Summary

Frequency Range	24.000 to 24.250 GHz
Standard TX/RX spacing	125 MHz
RF Channel Bandwidth (minimum)	24 MHz
Modulation type	FM
Transmission Configuration	Simplex Video, dual duplex control channels
Control Channels are	RS422 Standard RS232 or RS485 Available

Transmitter Characteristics

RF Source	Oscillator/Multiplier
Guaranteed power output	250 mV/m @ 3 m from transmit antenna
Frequency Stability (-37 to +74 C)	+/- 0.0005%

Receiver Characteristics

Type	Superhetrodyne
Noise Figure	6.2 dB Typical
Video Threshold	- 80 dBm
Maximum Receiver Input	- 10 dBm

Antenna Characteristics

Type	Parabolic
Diameter	12.5 Inches (31.8 cm)
Polarization	Linear
Front to back ratio	40 dB
Beamwidth @ 3 dB points	3.5 Degrees

Environmental Characteristics

Ambient Temperature Range	- 37 to +74 Degrees C
Storage and Transportation	- 40 to + 80 Degrees C
Humidity	Up to 100%

Transmission Data

System Gain	137 dB
-------------	--------

Input Voltage Requirements

Power Input	120 VAC +/- 10%
Brown-out voltage	90 VAC
Line frequency	50/60 Hz

FCC Information

FCC Identifier	108SDC-2423
FCC rules part number	15
Frequency range	24.000 to 24.250 GHz
Frequency tolerance	+/- 0.0005%
FCC Maximum power output	250 mV/m @ 3 m from transmit antenna

Size and Weight

Height	Depth	Width	Weight
15"	12"	15"	10 pounds
38 cm	30 cm	38 cm	4.6 kg

Outdoor RF unit, No Indoor Interface unit is required

Power Consumption

Outdoor TX/RX	25 Watts Maximum per link
---------------	---------------------------

CONNECTORS AND CABLING

Control cabling connector for RS422	Multi-pin connector mating connector furnished
Video cabling	RG-59/U or RG11/U (100% Shielded)
Video cable connectors	TNC
Power connection (110 VAC)	Six foot power cord with 3 prong plug

POWER SUPPLY OPTIONS

230 VAC
48 VDC
24 VDC, for Solar

Units are set to specified frequencies with switch.

Spares: 1 Unit required for A Channels
1 unit required for B Channels

FREQUENCIES: A ANTENNA

CHANNEL	Transmit	Receive
7	24.035	24.160
8	24.060	24.185
9	24.085	24.210

FREQUENCIES: B ANTENNA

CHANNEL	Transmit	Receive
7	24.160	24.035
8	24.185	24.060
9	24.210	24.085

www.arcelect.com