

## NS24 Series COFDM Video Receiver

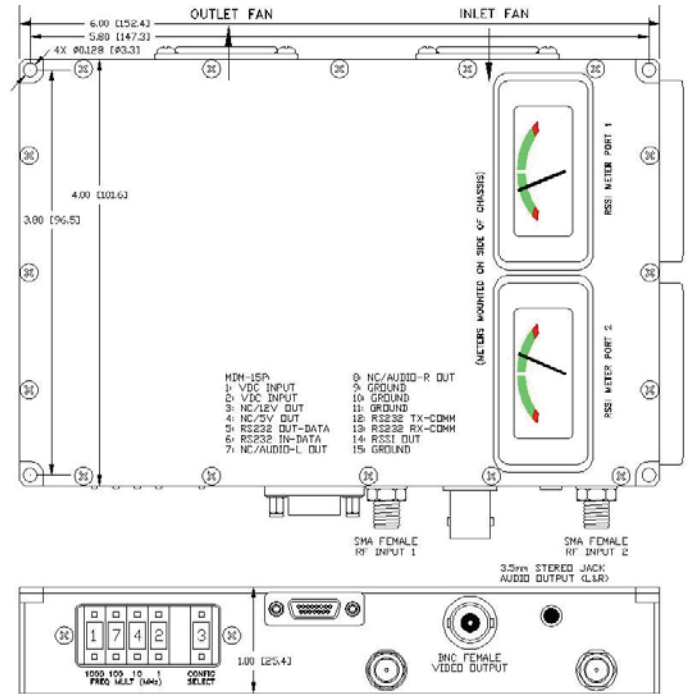
**Excellent Digital Video Receiver for Urban Multipath Environments!**

NSMS' NS24 Series COFDM video receivers are designed for high quality COFDM video reception in high multipath and urban environments.

The NS24 has low power draw, excellent sensitivity, JPEG2000 decoding, and full frequency band channelization. Many COFDM parameters are user-selectable: occupied bandwidths of 1.25 and 2.5 MHz; QPSK, 16QAM, or 64QAM modulation; FEC rates from 1/6th to 2/3rd, guard interval from 1/4 to 1/16, and 128 or 256 Bit AES encryption. NS24 receivers are optionally configured with up to two audio channels and are standard equipped with an auxiliary data channel.

Frequency may be selected locally with chassis-mounted BCD switches, remotely through the transmitter's RS232 serial interface, and locally/remotely with configurable pre-sets.

The NS24 Series receivers are designed to withstand harsh environments and are ideal for law enforcement, surveillance, UAV, UGV, military, and other applications requiring high quality video receiver in a compact, rugged package.



### DESIGN FEATURES:

- **24 Cubic Inch Package (4"x6"x1")**
- **Low Power Draw**
- **Full Band Channelized**
- **10 Configurable Pre-Sets**
- **JPEG2000 Video Decoder**
- **NTSC or PAL Video Output**
- **1.25 / 2.5 MHz Selectable BW**
- **QPSK / 16QAM / 64QAM Selectable Modulation**
- **AES 128 / 256 Bit Selectable Decryption**
- **Diversity Antenna Configuration**
- **Dual Chassis Mounted RSSI Meters**
- **Optional Stereo Audio**
- **Auxiliary Data Channel**
- **(Non-DOMO Based)**

# NS24 COFDM Video/Audio Receiver (non-DOMO based)

## RF CHARACTERISTICS

Frequency Range  
(Specify): ..... 340 – 400 MHz - 100 kHz Channels  
(Other Ranges Available) ..... 1430 – 1540 MHz - 1 MHz Channels  
..... 1700 – 1850 MHz - 1 MHz Channels  
..... 2200 – 2399 MHz - 1 MHz Channels  
..... 2400 – 2500 MHz - 1 MHz Channels  
..... 4400 – 4999 MHz - 1 MHz Channels

Frequency Selection  
(Specify): ..... Channelized (Full Band) - BCD Switches, RS232 Remote Control, and Programmable Switches

Frequency Stability: .....  $\pm 4$ ppm Over -20°C to +70°C

Input Impedance: ..... 50  $\Omega$  Nominal, VSWR 2:1 Maximum

Maximum RF Input: ..... 0 dBm Without Damage

Noise Figure: ..... 3 dB Maximum

Image Rejection: ..... 50 dB Minimum

Signal Bandwidth: ..... 1.25 MHz or 2.5MHz – Selectable

Signal Strength: ..... Dual Chassis Mounted RSSI Meters

Configuration: ..... Diversity Antenna

## COFDM VIDEO/AUDIO CHARACTERISTICS

Modulation Type: ..... QPSK, 16QAM or 64QAM - Selectable

Input Impedance: ..... 75  $\Omega$  Nominal, Unbalanced

Video Encoding: ..... JPEG2000

Frame Rate: ..... 30 FPS (NTSC) or 25 FPS (PAL)

Horizontal Resolution: ..... 704, 528, 480, or 352 Pixel - Selectable

COFDM Carriers: ..... Approximately 200

Guard Interval: ..... 1/4, 1/8 or 1/16 - Selectable

Latency: ..... <70 msec, End to End

Audio Channels (Specify): ..... Zero, One, or Two (Stereo)

Audio Output Level: ..... -10 dBV Line

Decryption: ..... AES 128-bit, or AES-256 bit - Selectable

## COFDM DATA CHARACTERISTICS

Interface Type: ..... RS-232 Half Duplex

Supported Data Rates: ..... Up to 115.2 kbps Selectable

Connection: ..... RS232 OUT-DATA

## CONFIGURATION INTERFACE CHARACTERISTICS

Interface Type: ..... RS-232

Interface Parameters: ..... 9600/8/1/None/None (Baud/Data Bits/Stop Bits/Parity/Handshake)

Connection: ..... RS232 RX/TC-Comm Ports

## POWER REQUIREMENTS

Input Voltage: ..... +11 to +16 Vdc, Reverse Polarity Protected

Current Draw: ..... 800mA, Typical @ 12 VDC

## MECHANICAL

Material: ..... CNC Machined T6061-T6 Nickel Plated Aluminum

Dimensions: ..... 4.00" W x 6.00" L x 1" H

Weight: ..... 20 oz. Maximum

Connectors: .....  
RF Inputs: ..... SMA Female  
Video Output: ..... BNC Female  
DC Supply  
Audio Out ..... RS-232,  
RSSI: ..... MDM-15P  
Audio Output: ..... 3.5mm Stereo Jack

## ENVIRONMENTAL

Temperature (Operating): ..... -20°C to +70°C

Acceleration: ..... 100 g, 3 Axes

Altitude: ..... Unlimited

Humidity: ..... Up to 95% @ Any Temperature Forming Frost or Condensation

*Product specifications subject to change.*

