Product Overview

619DSRI

Setting a new standard in audio bridging and interoperability, the 619DSRI provides enhanced audio performance, increased functionality and simplified interfacing and application configuration. The 619DSRI gives the communications integrator powerful features that can be used to substantially increase the effectiveness of new and existing radio networks using dynamic configuration.

Power	
Operating Supply Voltage	+12VDC (+11 to 28VDC)
Operating Current	300mA (typical) @12V (170mA @24VDC)
Network Interface	
Interface	10/100 BASE-T Ethernet with auto-MDIX detection
USB Interface	
USB	2.0 compliant (1.1 backward compatible)
Real Time Clock	
Clock Drift per day	3s (Clock Adjusment set to 0ms)
Physical	
Dimensions	485mm(W) x 45mm(H) x 255mm(D)
Environmental	
Operating Temperature*	0 to 50°C (32 to 122°F) limited by LCD module
Storage Temperature	-20 to 70°C (-4 to 158°F)
Rel Humidity	95% (non-condensing)
Audio	
Frequency Response	67 to 3600Hz (Input calibrated @1kHz set to -10dBm)
Audio Latency	22ms (delay from audio input to audio output)
Distortion	1.35% (1.3 to 2.0% 1kHz @ -10dBm across 600Ω)
Crosstalk	-60dBm max (Between adjacent channels across 600Ω with Levels set to default and incoming 1 kHz frequency set to -10dBm)
Gain Tolerance	-1.0 to +1.0dBm
Input Impedance	600Ω
Input Level	-10dBm (nominal), +5dBm (max)
Input Gain	-17.5 to +17.5dBm (software controlled)
Output Impedance	600Ω
Output Level	-10dBm (nominal), +3dBm (max)
E&M 4-Wire	
Busy Configurations	Contact/Voltage/Switched-ground/Switched-power
PTT Configurations	Contact/Voltage/Switched-ground/Switched-power

Busy/PTT Latency	6ms (busy delay set to 0 ms)
E Signal Input Range	3 to 30VDC
E Signal Internal Supply	10VDC (typical)
M Signal Relay Voltage	50VDC (max)
M Signal Relay Current	100mA (max)
M Signal Relay Power	0.5W (max)
VOX	
2.5 V Detection	-21 to -22dBm (Tested with Frequency Sweep from 300-3400Hz)
1.25 V Detection	-27 to -28dBm (Tested with Frequency Sweep from 300-3400Hz)
0.625 V Detection	-34 to -35dBm (Tested with Frequency Sweep from 300-3400Hz)
Selcall Signal	
Schemes	CCIR, EEA, ZVE1, ZVE2, PZE1, ZVEIR3, EIA, DZVE1
Pre-Code Digits	3 to 6
Selcall Range	0 to E
Detection Level	-32 to +4.6dBm (-10dBm typical) Maximum level is the selcall level before it becomes distorted with minimal Noise present. Note: At -32dBm level, the failure to detect selcall can reach 2%
Detection Accuracy	+/- 2Hz
Output Level	+3.5dBm (max) Maximum level is the level before selcall signal becomes distorted across a 600Ω resistor. Maximum level is determined when Tone Level = 0dB and Transmit level = 3.66dB.
DTMF Signal	
Detection Level	-25 to +5dBm (-10dBm typical)
DTMF Range	Digits 0 to 9, # and *
Detection Period	50ms (min) with 50ms (min) gap between tones
Interdigit Timing	Tone + Gap < 10 s
Output Accuracy	+/- 1 Hz (0.5Hz typical)
Output Level	+4dBm Maximum DTMF level is the level before DTMF signal becomes distorted across a 600Ω resistor. Maximum level is determined when DTMF Level = +17.69dB and Transmit level = 4.10dB
CTCSS 4-Wire Port	
Detection Level	-30 to 0dBm (-30dBm typical)
Detection Accuracy	+/- 3Hz (for Input CTCSS level of -30dBm)
CTCSS Tone Rejection	-40dB (@100Hz)
Tone Detection Latency	50 to 126ms
Output Level (67 Hz)	-27 to -7.4dBm (Maximum CTCSS level is the level before CTCSS 67Hz signal becomes distorted across a 600Ω resistor. Maximum level is determined when Rx Level = 0.0dB and Transmit Level = +4.10dB.)
Output Level (254.1 Hz)	-25 to +3.0dBm (Maximum CTCSS level is the level before CTCSS 254.1Hz signal becomes distorted across a 600Ω resistor. Maximum level is determined when Rx Level = 0.0dB and Transmit Level = +12.67dB)

Output Frequency Accuracy	**+/- 1Hz**
Inband	
Detection Level	**-30dBm**
Detection Accuracy	**+/- 4Hz (@ -30dBm Input level)**
Inband Tone Rejection	**-40dB**
Tone Detection Latency	**80 to 124 ms (@ -30dBm Input)**
Output Level	**-35 to +3.5dBm (Maximum Inband level is the level before Inband 2500 Hz signal becomes distorted across a 600Ω resistor. Maximum level is determined when Inband Level = 0.0dB and Transmit level = +3.66dB)**
Output Frequency Accuracy	**+/- 1Hz**
Digital I/O Interface (DB25 Connector)	
Input Voltage	**+5 to +30VDC**
Analog Input Voltage	**0 to 16.5VDC**
Resolution	**10 bits**
Max Protection on Analog Input	**20VDC**
Output Relay Voltage	**30VDC**
Output Relay Current	**1ADC**
Output Relay Power	**30W**
Monitor Port	
Load Impedance (1kHz)	**100Ω (typical)**
Output Level	**-3.35dBm (Measured across 100Ω with Input Frequency @ -10dBm and Rx Level=-1.06dB. Max level is determined when signal is about to distort.)**
Connectors	
Power 1	**Standard DC Female**
Power 2	**Molex 2-Way (MSTB2G)**
Radio Port	**8-Way US Modular (8P8C)**
Digital I/O Interface	**DB25 male**
Network Interface	**8-Way RJ45**
USB Interface	**USB Type B male**
Monitor	**3.5 mm TRS jack**