DSR-4410MD

Satellite Multiplex Decrypter

Features

- DigiCipher® II conditional access control
- Concurrent decryption of up to 64 services, each service may include video, multiple audio channels and data
- Stackable 1RU chassis design
- Dual L-Band input ports
- Supports both C-band and Ku-band
- Advanced modulation support for 8PSK Turbo and DVB-S2
- ASI Input
- Dual ASI and Gig-E transport output with selectable rates
- 10/100 Base T Ethernet port for SNMP monitoring and control
- IP datacasting output
- Outputs NTSC video and analog audio for local monitoring
- Form-C relay for fault signaling
- Background software download capabilities

Product Overview

The ARRIS DSR-4410MD is a powerful digital headend product, capable of simultaneous decryption of up to 64 services. With advanced modulation support, the DSR-4410MD can output a full transport multiplex with both MPEG-2 and/or MPEG-4 services at an information rate of up to 160 Mbps.

The ARRIS DSR-4410MD comes equipped with industry-standard interfaces, such as dual ASI outputs, that enable seamless connection to head-end equipment. The DSR-4410MD also accommodates the current trend for distributing MPEG-2 transport streams over Gigabit Ethernet interfaces throughout digital headends.

Packaged in a 1RU chassis, the DSR-4410MD offers local monitoring of a single service and the ability to step through the authorization and encryption state of each service. In the event of a transport stream fault, or loss of authorization for any of the provided services, the DSR-4410MD will trigger an alarm indication for the user.

For more information regarding any of these features, contact your ARRIS sales representative.

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Specifications

L-BAND INPUT

Input Signal Level:	(–)65 dBm to (–)25 dBm
Input Frequency:	950 – 2150 MHz
Input Impedance:	75 Ω
Input Connectors:	Two (2) F-type
LNB Power Out F-Connector:	16V DC min/450 mA

DIGITAL PROCESSING

Modulation Modes:	OQPSK, QPSK, 8PSK turbocodes, and DVB-S2
Symbol Rates:	3.25 to 29.27 Msps (QPSK), 1 to 30 Msps (8PSK turbocodes), 5 to 30 Msps (DVB-S2)
QSPK FEC Rates:	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8 (@3.25 to 29.27 Msps) 5/11 (@ 19.51 and 29.27 Msps)
8SPK (turbo) FEC Rates:	2/3 (1.9), 3/4 (2.05), 3/4 (2.11), 3/4 (2.19), 5/6 (2.30), 8/9 (2.40)
DVB-S2 FEC Rates:	3/5, 2/3, 5/6, 8/9, 9/10
Eb/No:	4.0 db @ 19.5 Msps (FEC=3/4)

VIDEO

Frequency Response (NTSC):	±0.75 dB, p-p,1 kHz – 4.2 MHz
Frequency Response (PAL):	±0.9 dB, p-p, 1 kHz – 5.5 MHz
Signal/Noise Ratio:	57 dB (min)
Differential Gain:	4.0 deg. p-p (max)
Difference Phase:	1.5 deg. (max)
Output Impedance:	75 Ω
Output Level:	1.0 V p-p ± 10%

AUDIO

Output:	Two stereo pair or two mono
Output Level:	±18.0 dBm, ±1.0 dB into 600 Ω balanced load, adjustable (0 to -15 dB)
Frequency Response:	±1.3 dB, 20 Hz to 20 kHz
Total Harmonic Distortion:	0.25% or better at 1 kHz
Signal/Noise Ratio:	85 dB or better at 1 kHz Isolation, L/R: 80 dB at 1 kHz
Isolation, L/R:	80 dB at 1 kHz
Impedance:	600 Ω
Connector:	Quick disconnect screw terminal

DATA OUTPUT

Ethernet 10/100 Base T:	1
Gig-E 10/100/1000 Base T:	1

ASI INPUT/OUTPUT

Output:	Dual ASI
Format:	Asynchronous serial interface
Transport Stream Data Rates:	
	27 Mbps, 54 Mbps, 81 Mbps, 160 Mbps
Standard:	CENELEC EN 50083-9

GIG-E OUTPUT

Output:	10/100/1000 Base T Ethernet
Transport Stream Data Rates:	
	54 Mbps, 81 Mbps, 160 Mbps Decryption
Number of Services:	Up to 64 independently encrypted services

CUE TONES

Signal Type:	Differential output
Signal Level:	–3 dBm, (600 Ω)/tone min
Connector:	Quick disconnect terminal

ALARM RELAY
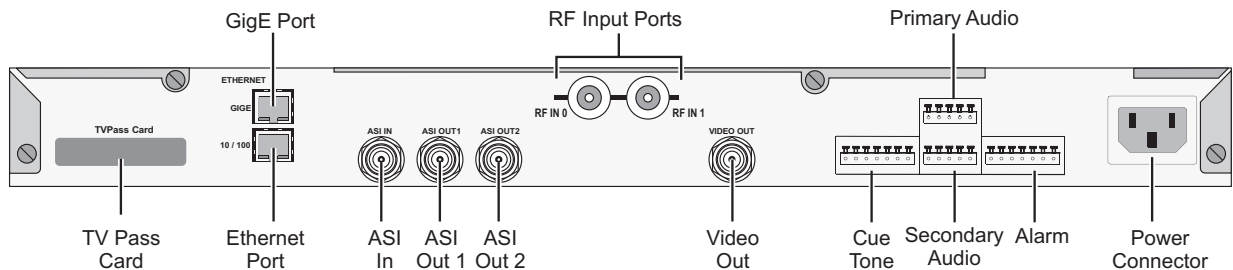
Form C:	**Quick disconnect screw terminal**

PHYSICAL

Operating Temperature:	0° to 40°C ambient
Humidity:	95%, relative maximum
Dimensions:	48 cm/18.90 in (W) x 46 cm/18.11 in (D) x 4.2 cm/1.65 in (H)
Weight:	5.0 kg/11 lbs (approx.)
Power Input:	90–250 VAC, 47–63 H, 40 W (max)

OTHER

Limited Warranty:	One year
Compliance:	UL listed/approved

Note: All features, functionality, and other product specifications are subject to change without notice or obligation.

GigE Port · RF Input Ports · Primary Audio · TV Pass Card · Ethernet Port · ASI In · ASI Out 1 · ASI Out 2 · Video Out · Cue Tone · Secondary Audio · Alarm · Power Connector

ARRIS™