

The IQDMSES provides full broadcast quality serial 4:2:2 to composite analog encoding. Full genlock and gamut limiter as standard. A 12-bit over-sampled DAC ensures highest quality reconstruction.

IQDMSES

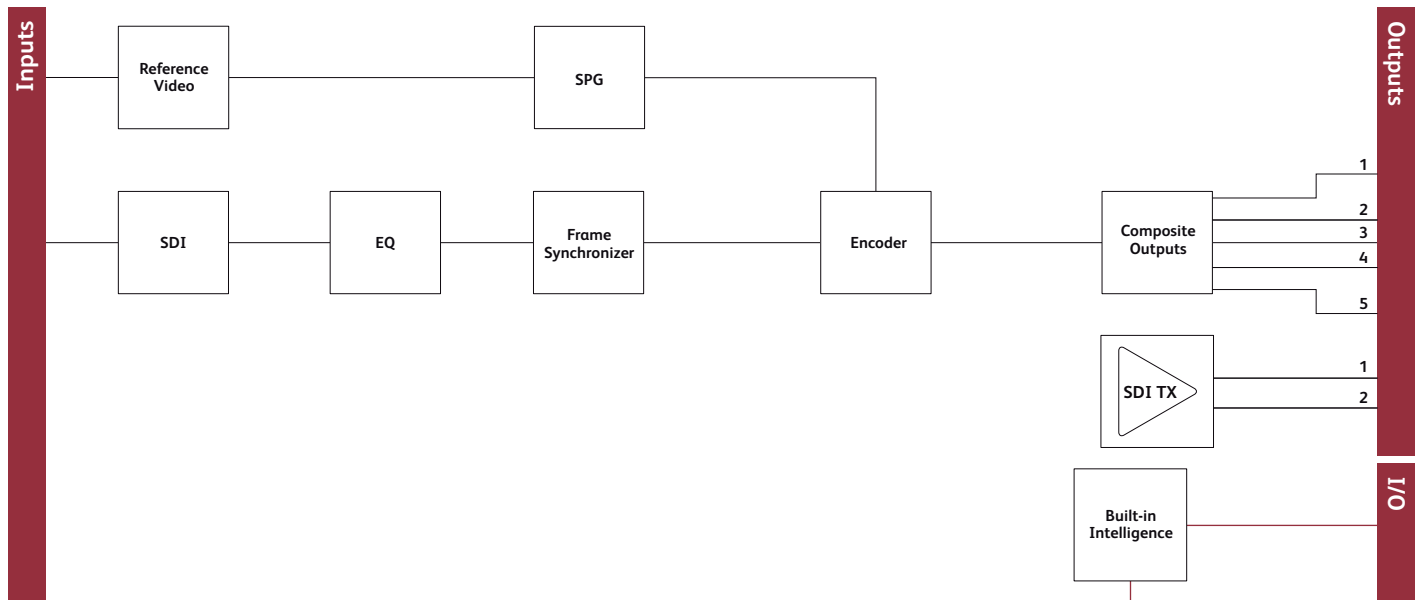
Multi-standard (PAL/PAL-N/ PAL-M/NTSC/SECAM) Encoder with Synchronizer - 12 bit

Does this module suit your application?

- PAL/NTSC/NTSC-J/PAL-M/PAL-N/SECAM broadcast quality encoding
- 12-bit over-sampled, DAC with 601 quality reconstruction
- Full genlock and minimum delay operation
- Full Frame Synchronizer
- Gamut limiting using optimal hue and intensity modification
- Internal pattern and VITS generation
- Pass or blank vertical interval data
- NTSC pedestal control
- Tolerant of SMPTE RP168 serial switching
- Selectable SECAM Bottles
- SECAM Genlock to PAL switch or SECAM
- SECAM dynamic notch
- Up to 5 x composite outputs
- Up to 2 x serial 4:2:2 relocked outputs
- EDH checking on SDI input
- RollCall compatible
- RollTrack link to tracking audio delays

Why should you choose this module?

- Broadcast quality encoding for PAL/NTSC/NTSC-J/PAL-M/PAL/SECAM broadcast applications
- Full genlock and minimum delay functions ensure accurate timing of composite video
- Vertical interval data can be passed or blanked as required by the downstream system
- RollCall ensures the control capability required by any systems
- 12-bit oversampling DAC ensures optimum analog quality
- Gamut limiting using optimal hue and intensity modification



Block Diagram for IQDMSES-1A-S

Order codes for IQH3A/1A enclosures

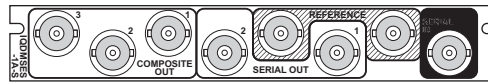
IQDMSES-1A-S

12-bit PAL, PAL-N, PAL-M, NTSC, SECAM Encoder with synchronizer. 3 composite outputs and 2 SDI outputs.

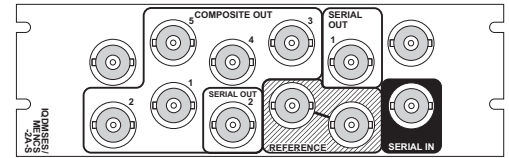
IQDMSES-2A-S

12-bit PAL, PAL-N, PAL-M, NTSC, SECAM Encoder with synchronizer. 5 composite outputs and 2 SDI outputs.

For more details on enclosure types please refer to datasheet IQH3A.



IQDMSES-1A-S



IQDMSES-2A-S

Technical Specification

Inputs and Outputs

Signal Inputs	
Serial digital Standards	1 x Equalized SDI SMPTE 259M-C-1997
Reference input	Composite or black burst

Signal Outputs

Serial digital Standards	Up to 2 x relocked SDI SMPTE 259M-C-1997
Composite Standards	Up to 5 x encoded outputs PAL/NTSC//NTSC-J/PAL-M/PAL-N/SECAM

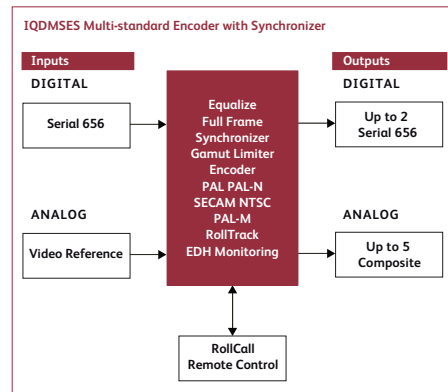
Synchronizer delay	Flashes if >1 ms
EDH	Present, Second Error, Hour Error

Functions Available via RollCall Only

Logging	Input change/EDHSch Error
EDH monitor	Show/Reset Statistics
RollTrack compatible	

Specifications

Reference input standard	525/625 (same standard as D1 input)
Composite or black burst reference level	Standard level ±3 dB
Serial input return loss	Better than -15 dB to 270 MHz
Serial output return loss	Better than -15 dB to 270 MHz
Composite encoding	12-bit
Y frequency response	5.5 MHz ± 0.05 dB
U/I and V/Q frequency response	<-3 dB @ 1.3 MHz >20 dB at 4.0 MHz
Differential gain	Better than 0.5%
Differential phase	Better than 0.2°
ScH phase	0° ±2°
Composite output return loss	Better than 35 dB to 5.8 MHz
Delay (minimum delay mode)	<4 µs



Card Edge and RollCall Controls

Card Edge Controls (also available via RollCall)	
Standard	PAL/NTSC//NTSC-J/PAL-M/PAL-N/SECAM
Test pattern select	Black, Color bars, various test lines
VITS insert	On/Off
Vertical data	Pass/Strip
Genlock mode	Internal (Min Delay) lock/Zero ScH Lock
Genlock H-phase offset	±1.9 lines
Genlock SC phase offset	360°
SECAM notch	On/Off
SECAM carrier	On/Off
SECAM pre-filter	ON/OFF
NTSC pedestal	On/Off
Blanking width	Normal/Legal minimum to CCIR 624
RGB limiter	On/Off
Gain	±0.5 dB
Preset unit	On
EDH	Present : error second : error hour

Power Consumption

Module power consumption	7.5 W max
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EMC Performance Information

Environment	Commercial and light industrial E2 Peak Mains Inrush Current following a 5 second mains interruption No mains input
Performance information	No performance degradations or cable length limitations

Indicators

Power supplies	OK, No Input, No Reference
ScH error	Output or Reference ScH error

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