

H₂ HydraQAM

Reduced per-card pricing to align with hospitality market requirements

The H₂ HydraQAM is a Calian, Advanced Technologies PCIe QAM modulator card designed for cost-sensitive RF modulator market applications, such as integration into multiple dwelling units (MDU's) and hospitality products.

Recognizing flexibility and price point as key drivers, the H₂ HydraQAM card can offer J.83 Annex A/B/C QAM modulation, plus Analog NTSC/PAL modulation with the PCIe interface or a Gigabit Ethernet interface.

H₂ HydraQAM is based on our existing high-density HydraQAM technology offering industry-leading QAM modulation performance that's suitable for cable headend applications. The H₂ HydraQAM card relaxes some of its predecessor's performance specifications to reduce per-card pricing and to align it with the hospitality market requirements.

The 16 channels of the H₂ HydraQAM are agile within a 160MHz window of spectrum, agile from 46 MHz to 640 MHz.

H₂ HydraQAM supports multiple applications including:

- QAM over PCIe for integration in your own enclosure or in a computer PCIe slot
- GigE input mounted in a chassis as a stand-alone product or used as an OEM card with another product

The H₂ HydraQAM can also use analog modulation to transmit analog RF video. The H₂ HydraQAM card can allow for a single platform to support analog video today, while also migrating to digital QAM video tomorrow.

Specifications

Input

Number of inputs • 16 MPEG2 MPTS streams

PCIe • PCIe Gen 2

ITU-T J-.83 modulation

Annex support • A/B/C

Number of RF channels • 16

MER (unequalized) • > 35 dB

Constellation • 64 QAM, 256 QAM

Symbol rate range • 5.056941 (64 QAM), 5.360537 (256 QAM)

Interleaver • All supported



Output

RF channels	<ul style="list-style-type: none">• Carriers agile within a 160 MHz window
Frequency range	<ul style="list-style-type: none">• 46 to 640 MHz
Power range	<ul style="list-style-type: none">• >54 - 60 dBmV Composite (42 - 60 dBmV per channel)
Power step size	<ul style="list-style-type: none">• 0.1 dB
Power accuracy	<ul style="list-style-type: none">• ± 1 dB
Frequency step size	<ul style="list-style-type: none">• -1 Hz
Amplitude flatness	<ul style="list-style-type: none">• 0.25 dB p-p over any 6 MHz slot
Connector	<ul style="list-style-type: none">• F-connector (75 ohm)

Power

Power	<ul style="list-style-type: none">• < 25 W
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Control interfaces

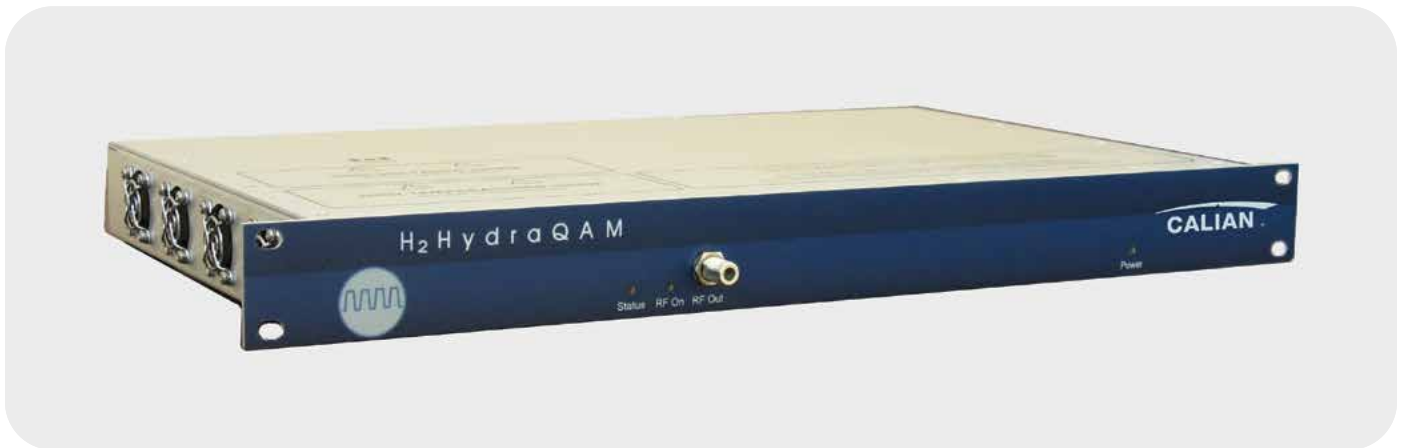
Drivers	<ul style="list-style-type: none">• Linux source code provided
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Physical

Size	<ul style="list-style-type: none">• PCIe form factor
Weight	<ul style="list-style-type: none">• 1 pound

Environment

Operating temperature	<ul style="list-style-type: none">• 0°C to 40°C
Storage temperature	<ul style="list-style-type: none">• -40°C to 85°C
Humidity	<ul style="list-style-type: none">• Operating: 0% to 50% non-condensing (max 80% for temperatures up to 31°C, decreasing linearly to 50% at 40°C) Non-operating: 10% to 95% non-condensing
Card certification	<ul style="list-style-type: none">• Subpart B of Part 15 of FCC Rules for Class B digital devices, • EN 55022, EN 55024



Chassis also available. Specifications subject to change without notice.



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