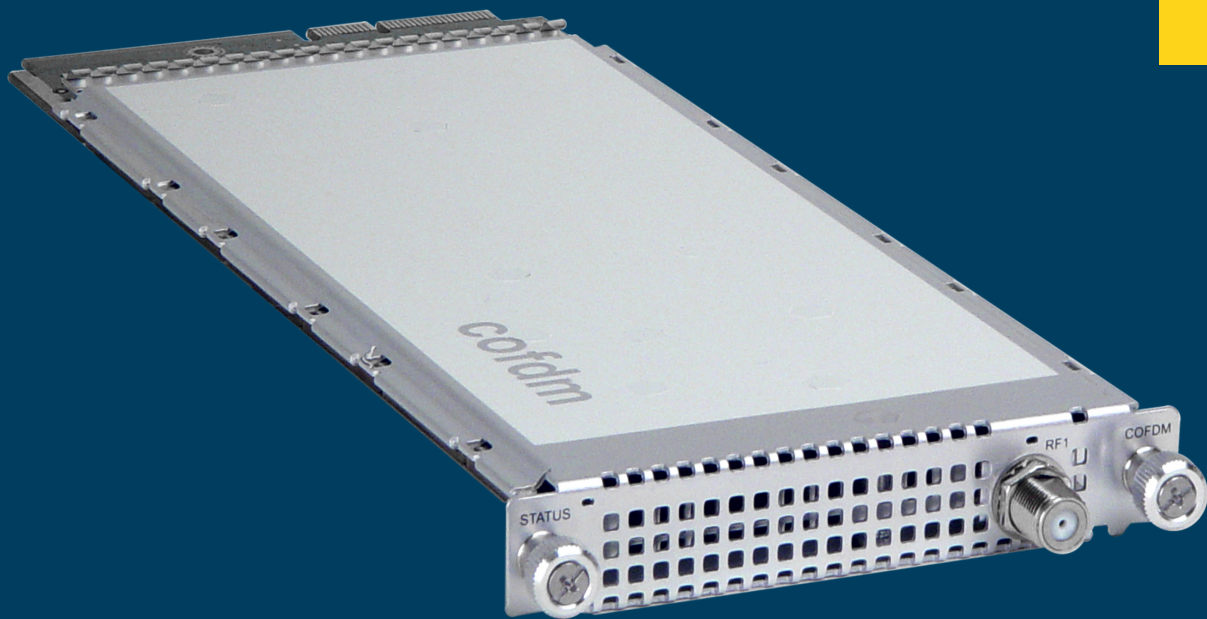


# TELESTE



COFDM output multiplexer for the Luminato platform

## HIGH QUALITY DVB-T MODULATION

The Luminato dual/quad COFDM module enables flexible multiplexing of SPTS and MPTS video services and PSI/SI table streams. High quality DVB-T modulation with agile up conversion secures seamless DVB-T delivery over HFC network.

### **Versatile functionality**

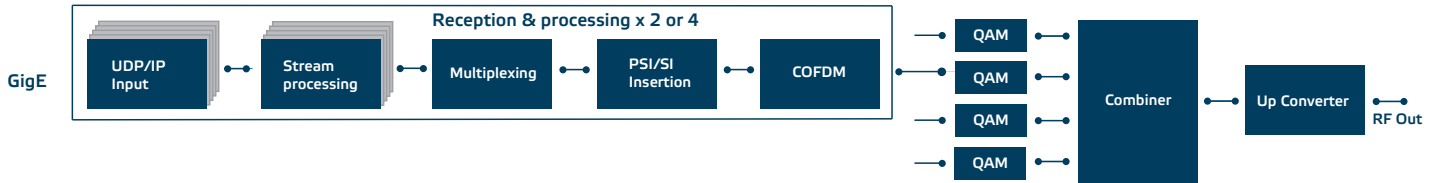
The Teleste Luminato dual/quad COFDM modules provide an advanced DVB-T platform for Cable TV operators for multiplexing of SPTS and MPTS video services and also PSI/SI table streams. High quality COFDM modulation with agile up conversions secures seamless DVB-T delivery over HFC network.

The Luminato dual/quad COFDM multiplexers support selection of free-to-air and scrambled services from IP stream sources, which can be adjusted to the operator's service line-up with the built-in advanced transport stream processing capabilities.

The Luminato dual/quad COFDM modules support Standard Definition and High Definition in CBR and VBR formats and numerous audio formats.

### **Effective flexibility**

The Luminato dual/quad COFDM modules are fully compatible with the high-performance Luminato chassis: they can be fitted freely to any of the six module slots. According to the Luminato system architecture the video processing is performed on the module itself, enabling low-cost applications even with partially equipped chassis. If needed, the performance can be scaled up at any time simply by adding more modules to the chassis.



Block Diagram, Quad COFDM

### Complete cable TV headend in 1 RU

One or more dual/quad COFDM modules can be included in 1 RU Luminato platform with Luminato satellite, terrestrial, cable, IP and DVB-ASI receivers, together forming a complete cable TV headend. The flexible architecture enables complementing service bouquet with locally received content at the edge of the network.

### Efficiency and reliability

With the advanced transport stream processing, operators can select the services and components that are relevant to their network, enabling them to efficiently manage the network capacity usage. Thanks to a high degree of automated functions the cost of system set-up and operation is minimised. This reduces downtime due to changes in the received services.

Parameter	Specification	Note	Parameter	Specification	Note
<b>IP inputs</b>			Out of band noise, 2)	<-58,5 dBc	1st adj. channel
Frame formats	UDP/IP, RTP/UDP/IP			<-62 dBc	2nd adj. channel
TS packet per UDP frame	1...7			<-64 dBc	3rd adj. channel
Max inputs streams/module	120			<-66 dBc	other channels
Dejittering buffersize	200 ms			-70 dBc	other channels, 3)
<b>Multiplexers</b>			Harmonics	<-63 dBc	
Number of multiplexer	2 or 4	1)	<b>IP streamer output of multiplexer</b>		
Max input service/multiplexer	120		Framing format	UDP/IP, RTP/UDP/IP	
Max components per service	32		Traffic type	unicast or multicast	
Output speed	depends on COFDM modulator settings		TS format	CBR, VBR	
<b>COFDM Output</b>			Max TS packet speed/ streamer	directly related COFDM output speed	
Transmission mode	2K, 8K		Maximum speed total	250 Mb/s	shared with 4 outputs
Transmission Guard Interval	1/32, 1/16, 1/8, 1/4		<b>General</b>		
QAM constellations	QPSK, QAM16, QAM64		Power consumption	15 W	
HO code rate	1/2, 2/3, 3/4, 5/6, 7/8		Supply voltages	24 V	
Impedance	75 ohm		Connectors, RF out	F	
Output return loss	>14 dB	active channel	Dimensions	20 x 109 x 253 mm	(HxWxD), 4)
	>12 dB	act. ch 81...862 MHz	Weight	0,4 kg	
	>10 dB	act. ch 862...1000 MHz	Enclosure classification	IP21	
Output Level	102 ... 112 dB $\mu$ V	Four adj. channels	Operating temperature	-10...+55 °C	
	104 ... 114 dB $\mu$ V	Three adj. channels	Storage temperature	-30...+70 °C	
	106 ... 116 dB $\mu$ V	Two adj. channels	Specification is met	0...+45 °C	
	110 ... 120 dB $\mu$ V	One channel	<b>Notes</b>		
Output Level accuracy	+/- 2 dB		1) Dual/Quad COFDM module can have 2 modulators in 8K transmission mode and 4 modulators in 2K transmission mode		
Output Power step size	0,2 dB		2) Values for quad channels active. Excluding harmonics (8 MHz channel)		
Output center frequency	85...999 MHz		3) Typical value outside 100 MHz of active channel block (8 MHz channel)		
Output frequency accuracy	+/- 30 kHz		4) Dimensions excluding connectors and locking screws		
Output frequency step size	50 kHz				



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P4P\_Luminato COFDM module\_0517

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