Gigaplex

Digital HDTV – Ku and Q Band Transmitter Family
Full Duplex DVB-MC/S – MVDDS- HyperWimax

Gigahertz Gigaplex Transmitters family transmit and receive MVDDS Digital Television and Internet streams from 300 Mbits up to 32 Gigabits according to DVB standards and ITU recommendations. No less than 160 TV channels HD standard (DVB-S2 MPEG4) for the Hypercable Gigaplex 300 with up-gradable to 2.000 HD TV Channels Capacity, or 4 Gbps IP TV. **Gigaplex Backhaul** option complies DVB-S2 and DVB-S/DSNG with Integrated Local Drop functionality Compliant with most terrestrial standards, including DVB-T and DVB-H using MFN and SFN modes, with Integrated high stability GPS reference clock and Up-conversion to VHF, UHF or L-band.

Key features

- Designed for quick on air Triple and Quadruple play BWA
- Easy to upgrade for the Triple Play wireless networks.
- MMDS 2.4/2.8Ghz relocation in 11.7/12.7 & 40,5/42,5 GHz
- DTV Broadcast, BWA and backbone applications with integrated Full Duplex radio function.
- Cancel the need for backhaul by optical or microwave links.
- KU band (10,7-12,7 GHz) on a basis of 8 up to 32 Gigabits
- Q Band (40,5-43,5 GHz) on a basis of 8 up to 48 Gigabits.
- Semi-automatic redundancy with HyCriC Network Manager System local and remote control.
- Virtual Multiplex Duplex function with embedded multiplexers in option
- Automatic redundancy with HyCroC integrated NMS local and remote control.
- MVDDS Multi-carriers Video Data Duplex Systems.
- Provide a capacity of 24 carriers @40 MHz bandwidth in one Gigahertz.
- Industry's Most Compact solid state transmitter receiver system.
- Advanced embedded intelligence in the Multicarrier exciter combiner system.
- Digital Signal Processing for Optimum signal quality.
- Easy to service modular design – hot-swappable modules - common set of spare parts
- Supports local and remote software upgrades–in-depth diagnostics.
- Very High Speed Internet with Very low Latency and Jitter.(HyperWimax option)
- Compliant with the Sustainable Development
- Energy Saving, Sun and Wind Powered.
- Maximizing Investment Return.

Terrestrial mobile TV & Data distribution

Another application of **Gigaplex Backhaul** using remote transceivers in the VHF-UHF-L Bands, is the efficient distribution of Digital TV, Data and radio channels **DVB-T**, **DVB-H, T Mediaflo Qualcomm** to remote transmission sites:

- Direct retransmission to large areas with additional power amplifiers
- Regional terrestrial coverage of shadow zones.
- Low power transmission in indoor area's like shopping centers, airports, hotels, etc

Hypercable the Wireless Cable

Product data sheet

*Gigaplex 600-S1-R MVDDS HDTV
10,7-11,7 GHz with Encryption, Video servers

Each Hypercable Gigaplex integrates the exciter platform designed to ensure any migration to any DVB standard and any new wireless application. With our proprietary automatic gain control (AGC) and Phase Noise Reducer the Gigaplex line delivers the maximum output power for a very low main power consumption and the better phase noise quality for DVB-S-QPSK,DVB-S2-8PSK-16APSK-32APSK-DVB-T Broadcasting standards. Gigaplex family have been designed with a highly modular architecture to reduce running costs and makes the transmitters and the system easy to maintain in service.

. Fine output power tuning 0 dBm to 40 dBm (**10 watts**). Very High Linearity compression point @ 1dB 20 watts
EIRP up to 60 dBm (**1.250 watts**) for broadcast service up to 100 km.
AGC better than +- 01 dB
. GPS 10 MHzgenlock
. Full IP Ethernet Gigabit interfaces and modules cabling.
. 48 VDC powered for easy solar powered
. Large family of transmit and receive antennas MISO and SIMO systems with space and angular diversity.

OPTIONS:
. GigaplexS2 modulators to drive MFN SFN remote transceivers.
. GigaplexTransceiver for DVB-T DVB-H Broadcasting VHF-UHF & L band

*Weatherproof
de-icing radome

*Gigaplex 300 HDTV
& HyperWimax
Triple Play MVDDS

Specifications

Hypercable Gigaplex Family Single Polarization Ref. S1 Orthomode Polarization Ref. O2	Useful data output and bandwidth occupancy, Modulation DVB-S2 8PSK	
KU Band: 10.7 - 11.7 or 11.7 - 12.7 GHz Q Band: 40.5 - 41.5 or 41.5 - 42.5 or 42.5 - 43.5 GHz	Bandwidth occupancy (MHz)	Data Throughput (Gigabits)
Gigaplex 300-S1 - 1 cabinet 44 RU	160	0.320
Gigaplex 600-O2 - 2 cabinets 44 RU	160	0.640
Gigaplex 600-S1 - 1 cabinet 44 RU	320	0.640
Gigaplex 1200-O2 - 2 cabinets 44 RU	320	1.280
Gigaplex 900-S1 - 1 cabinet 44 RU	480	0.960
Gigaplex 2000-O2 - 2 cabinets 44 RU	480	1.920
Gigaplex 1300-S1 - 1 cabinet 44 RU	640	1.280
Gigaplex 2600-O2 - 2 cabinets 44 RU	640	2.560
Gigaplex 1600-S1 - 2 cabinets 44 RU	800	1.600
Gigaplex 3200-O2- 4 cabinets 44 RU	800	3.200
Gigaplex 2000-S1 - 2 cabinets 44 RU	960	1.960
Gigaplex 4000-O2 - 4 cabinets 44 RU	960	3.920

*pictures from M/M/D/S Hypercable Distributors

For further information, about Operators and Distributors franchising please contact M/M/D/S Hypercable

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