



## CHP Max5000™ CHP-GQTX

### 1GHz Forward Path QAM Transmitters



- 1GHz technology
- 10dBm output provides transmitter reach of up to 150km
- Optical output available at odd ITU channels 21 through 61
- Dual high isolation input
- Low profile footprint allows 200 transmitters in a standard rack
- Universal local or remote management through Craft interface and SNMP with HMS

ARRIS CHP Max5000™ Advanced 1GHz QAM Transmitters are ideally suited to transport digitally encoded video (16/64/256-QAM) and QPSK data from the headend to a hub or node. These forward path transmitters can accept narrowcast QAM signals, telephony, etc. from 550 to 1002MHz and convert the RF input to an optical output at DWDM wavelengths available at odd ITU channels 21 through 61. The optical output power of 10dBm provides a transmitter reach of up to 150km when used in conjunction with an EDFA. CHP Max5000 1GHz transmitters are dual-input, 10dBm output, hot-swappable transmitters with integrated management through the local Craft GUI and remote management via SNMP HMS-compliant interface for external connection to an element manager.

The 1GHz transmitter's dual-input capability provides isolation that is much superior to alternative offerings, enabling the possibility to use "broadcast" QAM channels on one input, while using "narrowcast" QAM channels on the other input without cross-talk impairments.

The high isolation eliminates having to add external devices to achieve similar performances, thereby lowering CapEx even further and reducing system complexity. Up to 10 CHP Max5000 transmitters can reside in the 2RU CHP Max5000 chassis, with RF input and optical bulkhead connector access on the rear panel. Thus, a standard 40RU rack holds up to 200 CHP Max5000 transmitters, providing exceptional space efficiency and reducing operational costs.

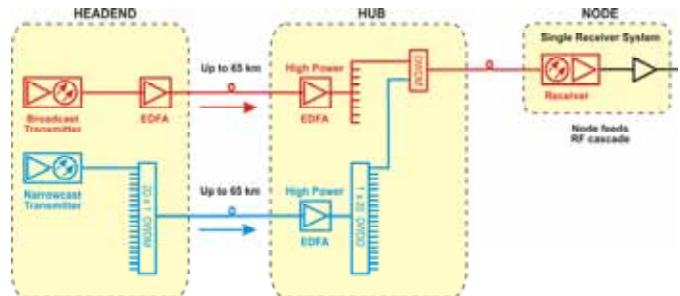
#### Features

- Superior performance to facilitate 256-QAM digital channel transmission capability
- 10 dBm optical output DWDM wavelengths available at odd ITU channels 21 through 61
- Plug-in attenuators for RF gain control and front-panel RF testpoint for convenient monitoring
- Downloadable firmware upgrades

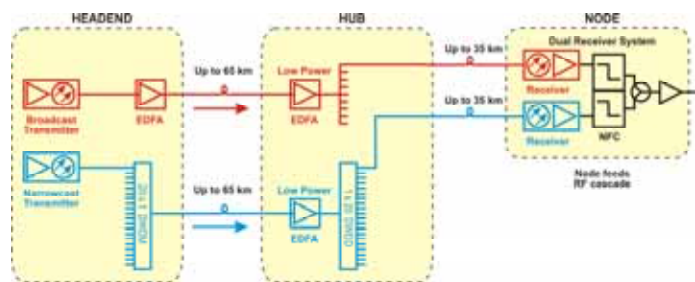
# CHP Max5000™ 1GHz Forward Path QAM Transmitters CHP-GQTX

## Application

In this example, narrowcast content from up to 20 QAM transmitters can be dense wave division multiplexed (DWDM) onto a single fiber in the headend and then transmitted up to 65km to a hub. An EDFA in the hub amplifies the optical signal and the wavelength of the associated narrowcast transmitter is demultiplexed by the DWDD. The output of the DWDD is multiplexed with the broadcast signal of the EDFA in the hub to combine both signals onto a single fiber going to the node.



In the dual receiver architecture, the major difference from the previous example is that the broadcast and narrowcast signals are not dense wave division multiplexed onto the same fiber in the hub. Instead, the broadcast and narrowcast signals are independently routed through the headend and hub to separate receiver in the node. The RF signals are then combined in the node.



[www.arris.com](http://www.arris.com)

Find more information about the CHP Max5000™ 1GHz Forward Path QAM Transmitters.

Product Specifications—CHP Max5000™ 1GHz Forward Path QAM Transmitters Technical Specifications (Publication Code: TM722A\_TS.pdf)

## Customer Care

Contact Customer Care for product information and sales

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