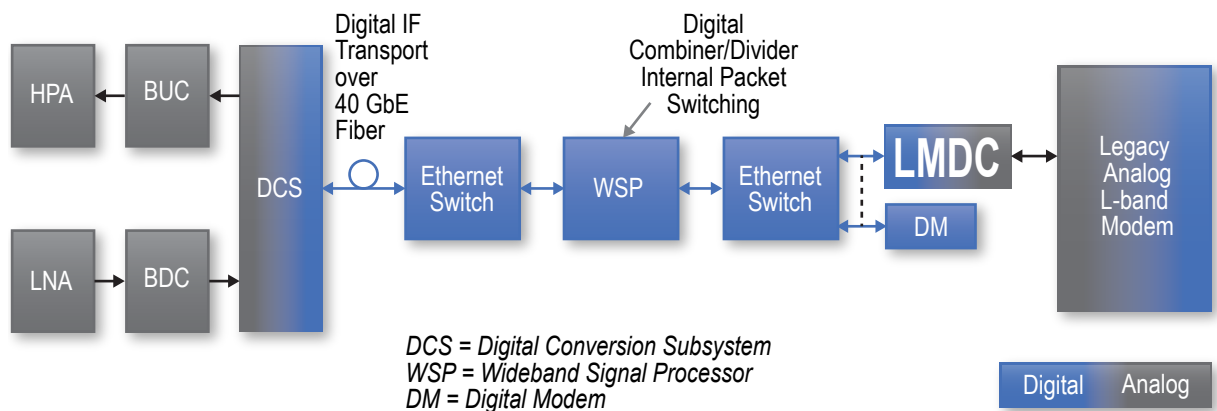


Legacy Modem Data Converter (LMDC)

Interface Analog L-band Modems with Digital IF SATCOM Terminals

The Legacy Modem Data Converter (LMDC) is the technology transition product that provides the interface between legacy analog L-band modems and modern Digital IF terminals. The LMDC is compliant with the Future Advanced SATCOM Technologies (FAST) Open Standard Digital IF Interface (OSDI). A typical application is illustrated below with the LMDC shown interfacing between the Digital IF terminal equipment and a legacy analog L-band modem.



Features & Benefits

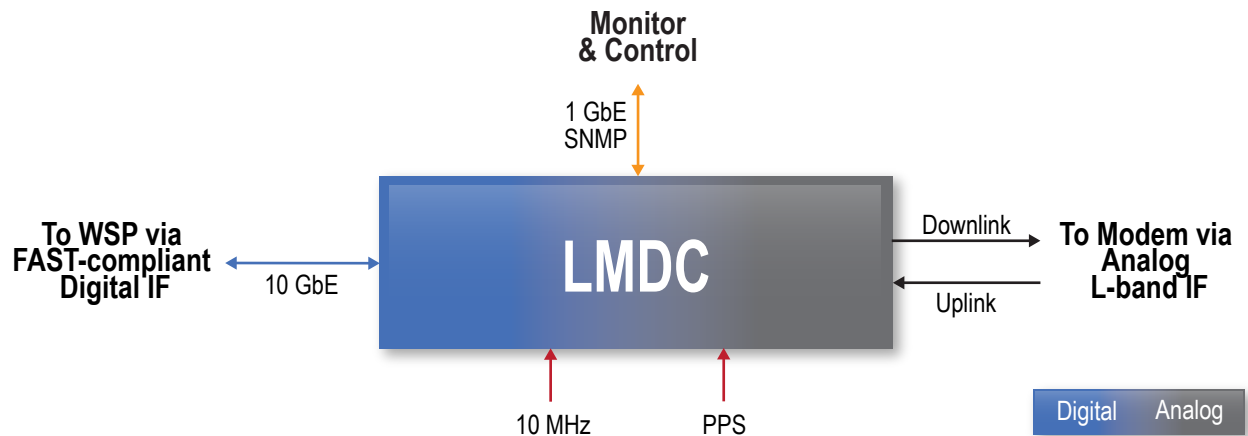
- Enhanced connectivity between baseband modem resources and antenna resources
- Enables dynamic allocation and switching of individual carriers amongst various antennas/feeds
- Compliant with the FAST Open Standard Digital IF Interface (OSDI)
- Uses legacy analog L-band modems with new Digital IF terminals
- Provides improved signal switching and routing to multiple antennas/feeds
- Enable traffic distribution over multiple terminals, local and remote
- Enables spatial diversity for jamming and fading mitigation
- Eases terminal fail-over redundancy
- Retains investment in analog modems inventory
- Small form factor, low cost, and high reliability

LMDC Capabilities

Analog Signal Interfaces	950 to 2150 MHz Transmit and Receive (coax)	Digital Signal Interface	10 GbE port (fiber)
Carrier Capacity	Any number of narrowband and/or wideband carriers with any modulation	Analog Clock Interface	10 MHz IN
Instantaneous Bandwidth	15 MHz (narrowband version) 125 MHz (wideband version)	Digital Timing Interface	1 Pulse Per Second (PPS)
Total Signal Power	Receive: -5 dBm Max Transmit: -40 to 0 dBm	Monitor & Control Interface	1 GbE SNMPv3
Frequency Agile Modems	Supports FH and MF-TDMA waveforms while conserving network bandwidth	Chassis	19" rackmount, 1 RU (smaller packaging optional)

LMDC Interfaces

The LMDC interfaces with the WSP via an Ethernet Switch and a 10 GbE connection. This Ethernet connection provides sufficient bandwidth for 125 MHz of analog bandwidth with as many carriers as are contained within that analog bandwidth. Monitor and control is provided with SNMP over a 1 GbE connection. Two analog L-band interfaces are provided to interface with the legacy modem. A 10 MHz sinewave and 1 PPS signal are used to synchronize the LMDC with the terminal equipment.



For further information on our products, email request to info@welkinsciences.com.