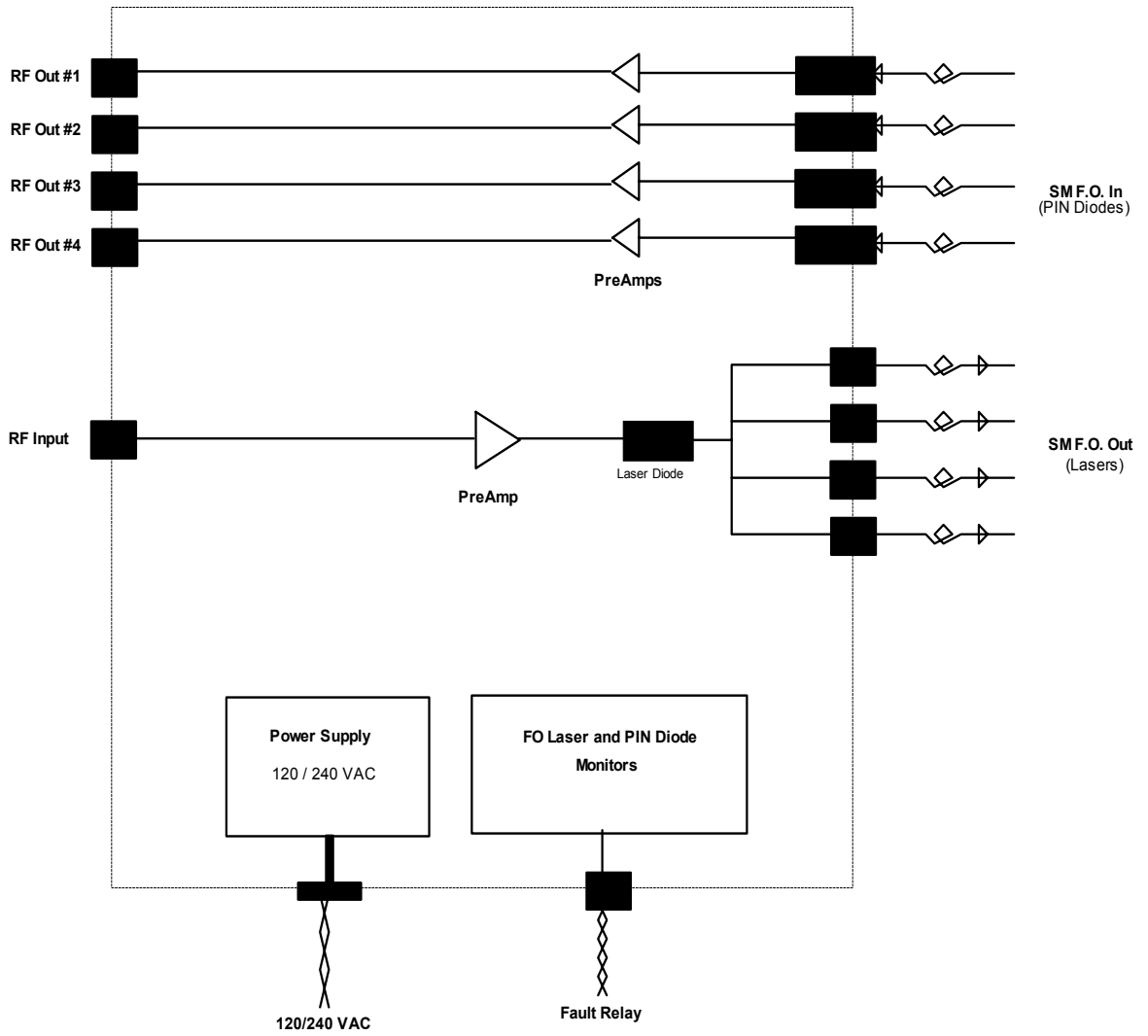
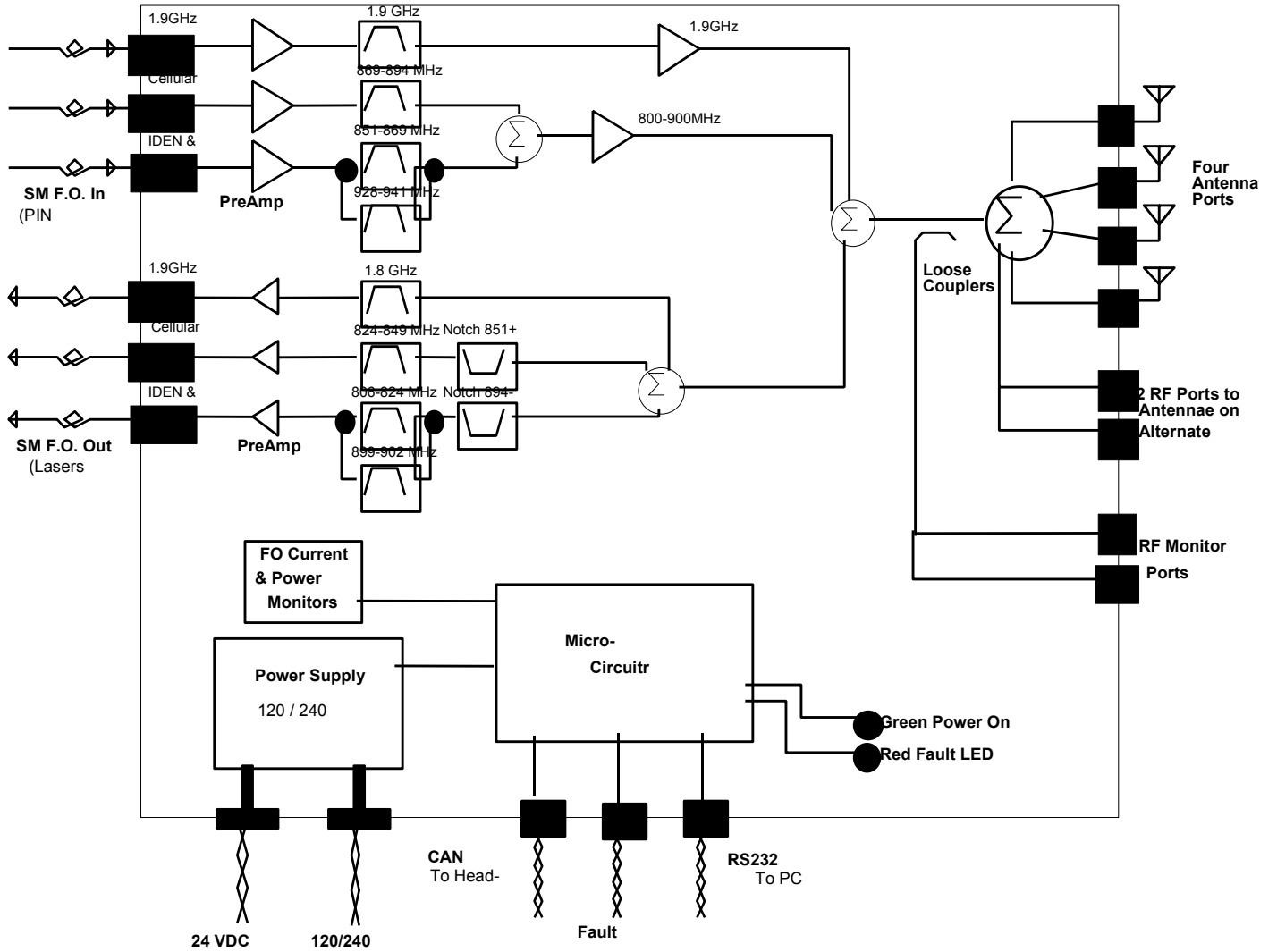


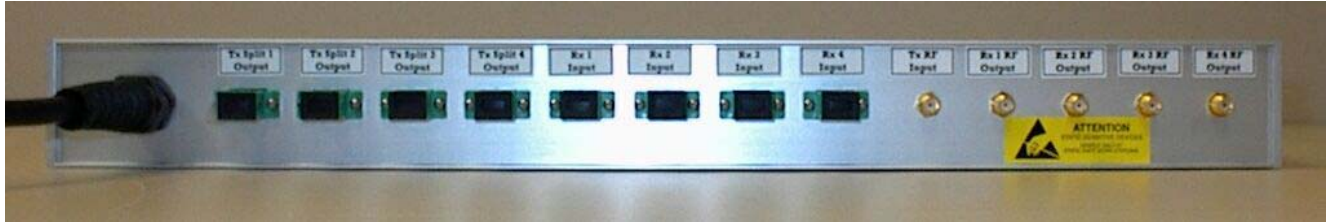
Block Diagrams LSU Head-End Module



LSU Remote Module

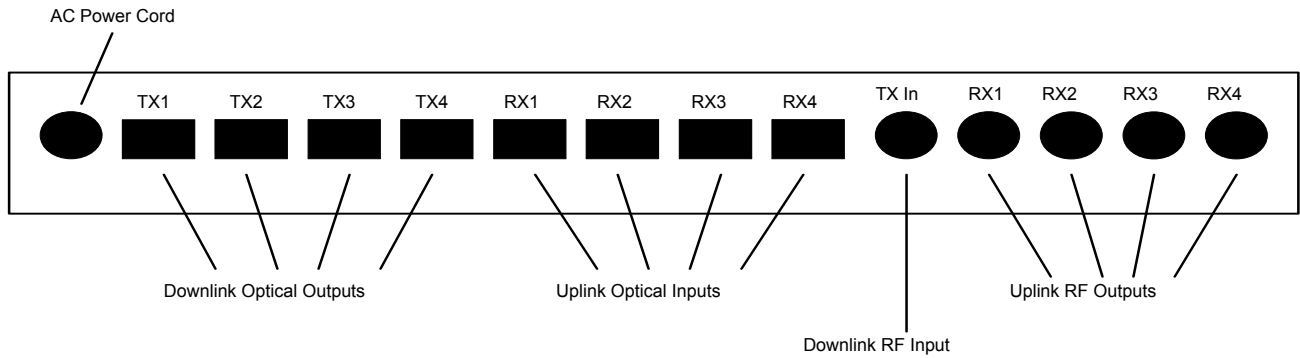


Connections LSU Head-End Module



Head-End Connections

SC/APC SingleMode Fiber-Optic & SMA RF Connectors

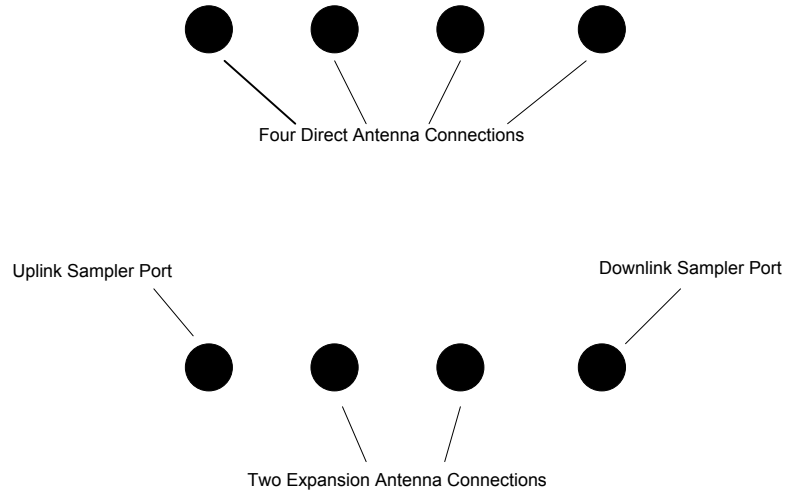


The Head-End has one Downlink RF Input providing the signal for four Downlink Optical Outputs, thus each Head-End Module services one and only one of the three Fiber-Pairs (PCS, Cellular, or iDEN/Trunking).

LSU Remote Module

Antenna Port Connections

SMA Connections



The Remote Module has 8 SMA RF Connections..

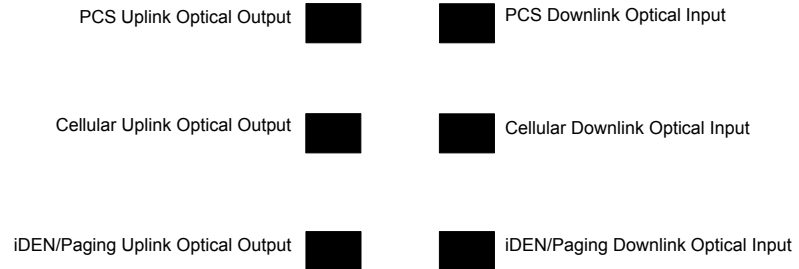
Main Antenna Ports (4): Used to connect to four identical distributed indoor antenna systems.

Expansion Antenna Ports (2): Connected to a secondary location via 2 of two-way combiners, and in turn provide connections to four more identical distributed indoor antenna systems.

Sampler Ports (2): Optionally allow an operator to monitor the Uplink and Downlink RF activity at approx. 30dB below the actual levels.

Fiber Optic Port Connections

SC/APC SingleMode Fiber-Optic Connectors



The Remote Module has 6 SC/APC Single-Mode Fiber-Optic Connections for cabling to the Head-End...

PCS Up & Downlink: Used for the PCS Fiber-Optic Pair connection to the Head-End.

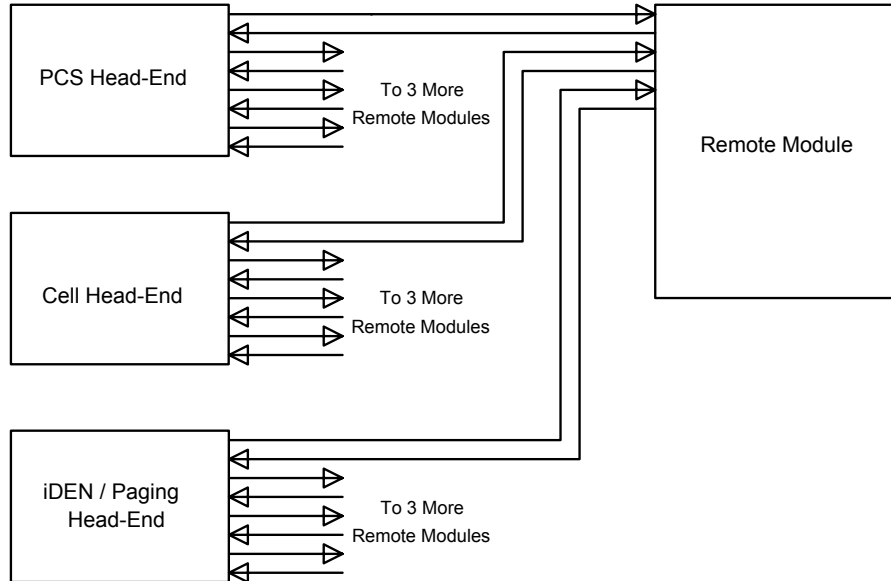
Cellular Up & Downlink: Used for the Cellular Fiber-Optic Pair connection to the Head-End.

iDEN/Paging Up & Downlink: Used for the combined iDEN / Paging Fiber-Optic Pair connection to the Head-End.

LSU Head-End to Remote Interconnects

Head-End to Remote Fiber-Optic Connections

Groupings of 3 Head-Ends to every 4 Remotes



The Single-Mode Fiber-Optic interconnections between the Head-End and Remote Modules are based upon the Head-Ends being organized on a "per Fiber-Pair" system. This fundamentally means that an installation requires three Head-Ends for every four Remote Modules. It also means that if you have a fully optimized system with all Head-End ports in use, and you add one more Remote Module, then another three Head-End Modules are required.