

PPC-10/37000 LMDS Solution

End-to-End Networking with PPC-10/37000 LMDS Solution

The market of Local Multipoint Distribution Service (LMDS) is exploding. More and more customers look on high capacity of LMDS as a media that can bring powerful communication services to industrial estates, business parks, and corporate campuses. With unique Ethernet-transparent LAN-to-LAN connectivity of PPC-10/37000, ELVA-1 Millimeter Wave Division (DOK Ltd.) represents a LMDS wireless solution for wide area Ethernet network comprising PPC-10/37000 LMDS base station and remote premises equipment.

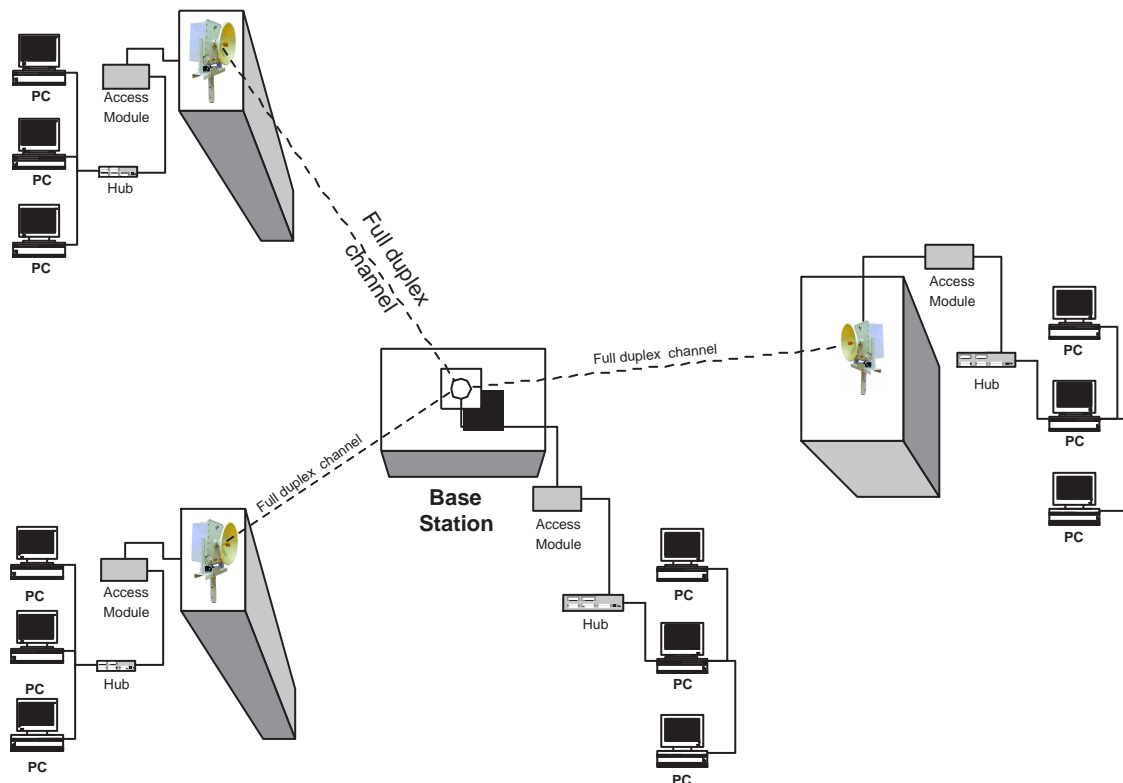
Like PPC-10/37000 Ethernet bridge, the PPC-10/37000 LMDS Solution is software-free, transparent LAN connectivity between the central location and up to 16 remote LAN segments. For a company network administrator all the traffic collected from each remote LAN segment to the base station physically looks just as a cable jack inserted to the hub. To connect a new remote office to the base station the only things you need to do are to install new PPC-10/37000 transceiver at the remote location, direct its antenna to the base station and insert its cable jack to the hub. The base station has a hardware-based algorithm for resolving of Ethernet collisions between LAN segments at the wireless communication.

While working at the same bands as the PPC-10/37000, the deploying of LMDS Solution must to conform the rule of a permanent line of sight between a base station and each of customer LMDS transmitter/receiver. Because of this, the base station has an omni-directional pattern with adjustable beam width to cover remote transceivers installed on buildings with a different height.

PPC-10/37000 LMDS is a cost effective solution compare to the set of the same number of PPC-10/37000 unidirectional bridges. It also easily resolves a last mile problem: connecting all remote network users to a central network without the prohibitive installation costs of fiber to the each site, and without the transmission limitations of copper lines.

With 40GHz as a basic band, ELVA-1 Millimeter Wave Division (DOK Ltd.) could ship PPC-10/37000 LMDS Solution working at a custom band, like 60GHz or 130 GHz band of the spectrum. LMDS, a high frequency wireless system operating in the 40GHz or custom spectrum, can be quickly deployed to cost-effectively deliver all LAN traffic like data, Internet, voice, video and multimedia services.

For more information about PPC-10/37000 bridge please visit <http://www.elva-1.spb.ru/drs/lmlds.html>



PPC-10/37000 LMDS Technical Characteristics

The number of customer transceivers, max	16
Operating frequency range of the Radio Module	37-39.5 GHz
Optional bandwidth*	60 GHz
Other custom bands	call
Bandwidth of emission	25 MHz
Output power	50 mW
Antenna gain not less	35 dB
The level of parasitic radiation no more than	50 dB
Data speed, each direction	10 Mbps
Maximum distance between Base station and Customer places	10 km
* For 60 GHz bandwidth	5 km
Length of a connecting cable	
LAN -to- Module of Access	0...100 m
Module of Access -to- Radio Module	0...100 m
The type of a connecting cable	
LAN -to- Module of Access	UTP5
Module of Access -to- Radio Module	UTP5
Main supply	
Radio Module	220 VAC
Module of Access	220 VAC
Consumed power	
Base Station Radio Module	N/A
Customer Station Radio Module	50 W
Module of Access	6 W
Weight and overall dimensions of Customer Station	
Radio Module with the antenna and Adjusting Module	20 kg; 50x50x50 cm
Module of Access	2 kg; 24x12x7 cm
Operating temperature	
Radio Module	-50 +70 °C
Module of Access**	+10 +40 °C
Admissible relative humidity	
Radio Module	100 %
Module of Access**	90 %

** For indoor use only.