

Time Division Multiple Access

Point to Multi-Point



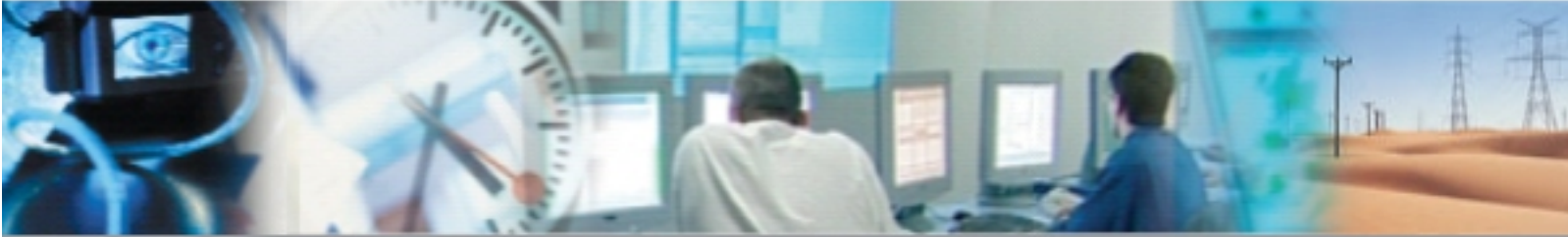
Time Division Multiple Access Point to Multi-Point (TDMA-PMP) combines the best of Switching and Transmission technologies. The product is particularly suited for sparsely populated areas with geographically dispersed clusters of customers aspiring for telecom facilities. It operates in L Band with line-of-site requirement between a Base Station Unit (BSU) and a number of Remote Station Units (RSUs). The equipment has standard PSTN interfaces, which facilitate rapid deployment. TDMA-PMP is designed to operate in a non-air-conditioned environment.



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SYSTEM ARCHITECTURE

A TDMA - PMP network consists of a BSU connected over radio to a maximum of 32 RSUs located within a radius of less than 30 kilometers. Each RSU in turn caters to a minimum of 8 and a maximum of 32 (in steps of 8) wired subscribers.

In order to meet the GOS (Grade of Service) requirements, a maximum of 256 subscribers are terminated on the RSUs having access to the BSU over 27 dynamically allocated time slots on radio channels. In addition, 40 wired subscribers can also be directly connected to the BSU, thus providing for a total capacity of 296 subscribers. Intra RSU calls do not occupy any time slot towards the BSU. The subscribers status and billing information is sent to the BSU over a shared signaling time slot.

AN ECONOMICAL RURAL RADIO

The C-DOT TDMA- PMP is a cost effective communication system best suited to rural areas with provision for phased growth of subscribers with short setup time. The system costs are low primarily because it uses radio instead of cables for transmission. Quick set up time are also ensured.

HIGH RELIABILITY

C-DOT TDMA-PMP's inherently fault tolerant system reduces the need for constant vigil. This reinforces its suitability for rural applications in developing countries where trained manpower, un-interrupted power supplies and proper logistics are usually limited. Even in cases of fault occurrence automatic diagnostics provided within the system ensure its immediate detection.

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EASY ADAPTABILITY TO CUSTOMER REQUIREMENT

The system provides flexibility through dynamic allocation of 27 slots for communication between BSU and RSUs. It can easily adapt to varying traffic amongst various RSUs between the RSUs and BSU. In order to balance the traffic not more than 8 subscribers of an RSU can occupy time slots towards the BSU

OTHER SYSTEM APPLICATIONS

- ✎ Corporate Networks
- ✎ Banking Network in a city
- ✎ Defence / Police Networks
- ✎ Industrial Networks

KEY FEATURES

Base Station Unit	One (with built in redundancy as applicable)
Maximum number of RSUs	32
Subscriber Capacity	256 radio subscribers and 40 subscribers connected to base
Number of Voice Channels	27
Voice Coding	32 kbps ADPCM
Interface with PSTN	30 channel digital trunk or 32 two wire physical or 4W (E&M) trunks
Frequency of Operation	1.5 Ghz (1427 to 1525 MHz)
Maximum number of subscribers per remote	32
PC Based Network Management	
Most of the subscriber features applicable to large subscribers covered	

TDMA-PMP

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