256P Rural Automatic Exchange (RAX)

CONNECTING SMILES THROUGH SUN, SNOW, SAND AND RAIN

The Villages of the world. The vast majority of which have fewer than 2000 inhabitants and are in remote areas. Where communication has forever been a major problem. The world, as we know it, has been progressing rapidly, leaving these villages and more importantly, the villagers bereft of substantial social and economic gains.

Introducing the C-DOT 256P RAX. The world class, cost-effective communication solution for rural areas. Developed with the sole purpose of transforming the villages. Removing natural barriers to progress through its versatility in any environment-subzero mountain ranges, tropical forests, vast deserts and coastal regions.

What is C-DOT 256P RAX

It is a digital, stored, program-controlled switching system with 256 terminations or ports. It employs a non-blocking 4-wire PCM switching network. Offering a low investment telephone service in rural areas, however far flung they may be.

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What makes C-DOT 256P RAX ideal for rural applications ?

It is ideal for rural applications since it provides immediate basic telephone connection with minimum infrastructure. It is easy to install and possesses a fault-tolerant system with inbuilt redundancy. Besides requiring no air-conditioning, it withstands dust, wide temperature fluctuations (-5 to 50 C), humidity and salinity. Moreover, it consumes very little power, sustaining itself despite frequent power failures due to low battery drain.

A distinguishing feature of the C-DOT 256P RAX is its simple and flexible connectivity through a satellite wide range of transmission systems such as UHF, VHF, radio and satellite. Because it is program-controlled, it can be easily integrated as per the network requirement through man-machine commands. Thus, proving to be an extremely cost-effective and viable proposition.

How can C-DOT 256P RAX suit differing requirements ?

It can act as a terminal exchange, an Integrated Local-cum-Transit exchange (ILT) to a purely transit exchange. And it can be placed in the secondary switching area as a tertiary center, providing connectivity among RAXs, TAXs and manual trunk positions, in addition to local subscribers, It also features Network Synchronisation, that is essential for satisfactory fax and Internet access applications.

As an independent exchange, th C-DOT 256P RAX provides man-machine interface for operation and maintenance form the exchange. These functions can be carried out either from the exchange itself, or remotely through Central Operation and Maintenance Centres.

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How accessible is the C-DOT 256P RAX technology ?

The technology can be easily accessed through a manufacturer-friendly transfer package, which includes bill of materials and audio-visual documentation. It also incorporates basic training of the technicial manufacturer`s technicians, and supports the development, testing and evaluation of the prototype, prior to the commencement of bulk production. Backed by an exceptionally versatile design and widely distributed manufacturers base, C-DOT has been guiding the product from its conceptualization to the final field deployment. Twenty manufacturers in the public, private and joint sectors have been the recipients of the technology so far. Their current production capacity is over 1.5 million lines per annum.

C-DOT 256P RAXs have been installed in large numbers all over India. They have also been exported to Vietnam, Bangladesh, Nepal, Yemen, Nigeria, Ethiopia, Ghana, Uganda, Angola, Namibia and many other countries.

What are the support services available ?

C-DOT has helped in the setting up of seventeen repair centres across India. C-DOT`s reservoir of trained and qualified manpower, combined with its ability to handle large soft-provide excellent post-commissioning field support for fault analysis and on-site rectification.

It can assist in the setting up of C-DOT 256P RAX service centres in any country that imports its technology and provide training to their technicians with the objective of making them self-reliant, in handling technical problems.
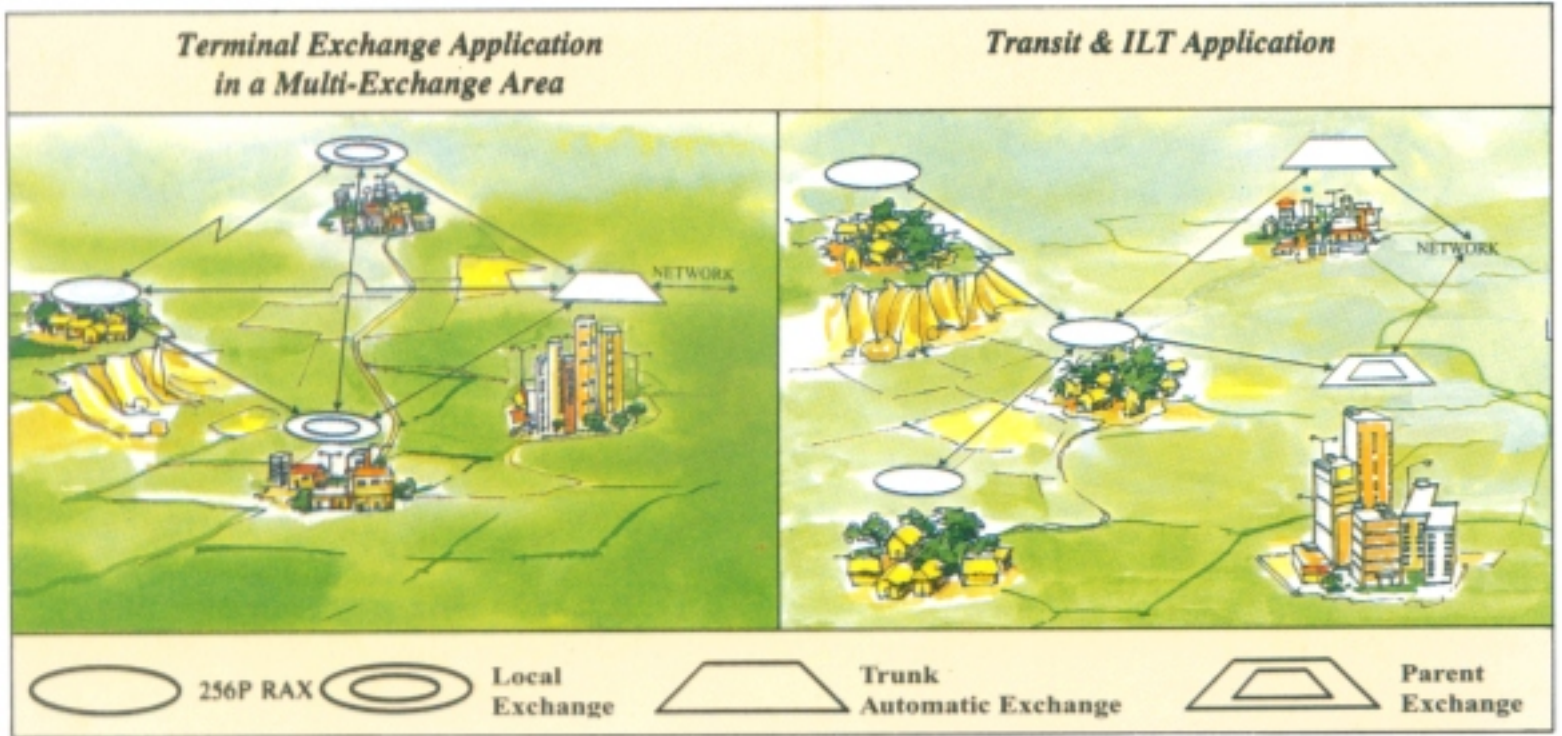
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Terminal Exchange Application in a Multi-Exchange Area

Transit & ILT Application

256P RAX | Local Exchange | Trunk Automatic Exchange | Parent Exchange

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C-DOT 256P RAX Features

System Features
Control
Capacity

Signaling between Subscriber
and Exchange
Line Exchange
Register Signalling on Trunks
Line and Trunk Termination

Loop Resistance

Charging Scheme

Metering Scheme

Traffic Analysis

Printouts
Traffic
Tones/Announcements
Network Synchronization
Environment Requirements

Power Supply

- 6502 microprocessor based SPC
- Non-blocking and 4-wire PCM switch
- Maximum 216 ports for terminating a mix of subscriber lines and trunks

- Decadic/DTMF
- LD/E&M/Digital/RD
- Decadic/Modified R2/CCITT R2
- Normal /CCB/CCB with 16 KHz metering
- 2-wire physical loop circuits
- 4-wire E&M circuits
- 30 channel digital trunks
- Subscriber line - 1200 Ohms.
- Trunk line 1500 Ohms.
- 4 modes of charging
- 9 time zones
- 8 different charging rates
- Subscriber meters
- Trunk group traffic
- Exchange meters
- Subscriber traffic
- Trunk traffic
- Total exchange traffic
- Spontaneous/On command/Periodic
- 4000 BHCA
- 8 tones & 8 announcements
- Available
- Follows Qm333 category B2 test standards
- Perfoms in non-airconditioned environment with adequate air circulation
- -48+/-4V DC with battery backup Primary, 230V +/- 10%, 50 +/- 2 Hz

Subscriber Features
- Dynamic O/G restrictions
- Call queuing
- Malicious call tracing
- Detailed call recording
- Hotline facility
- CLIP
- Call budgeting
- NLDO/ILDO

Trunks and routing Features
- Route up to 64
- Prefixing on incoming trunks
- Route restrictions
- Trunk offer
- Detailed billing on trunks

Administrative Features
- Fields programmability of parameters
- Password protection user-friendly MMI call monitoring

Maintenance Features
- Alarm reporting on phone & printer

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