

The Alcatel 7390 LMDS point-to-multipoint broadband wireless access solution provides ISDN Basic Rate Interface (BRI) service in combination with the Alcatel 7390 LMDS Exchange Base Station (XBS) access node. The 7390 XBS provides the v5.2 links for the switch, and can be collocated with the Alcatel 7390 Digital Base Station (DBS) or located at another site.

Highly scalable and fully managed as part of a multiservice solution, Alcatel 7390 LMDS products can be rapidly deployed to provide a powerful, cost-effective access solution for the first mile delivery of a wide range of data, Internet, voice and video services.



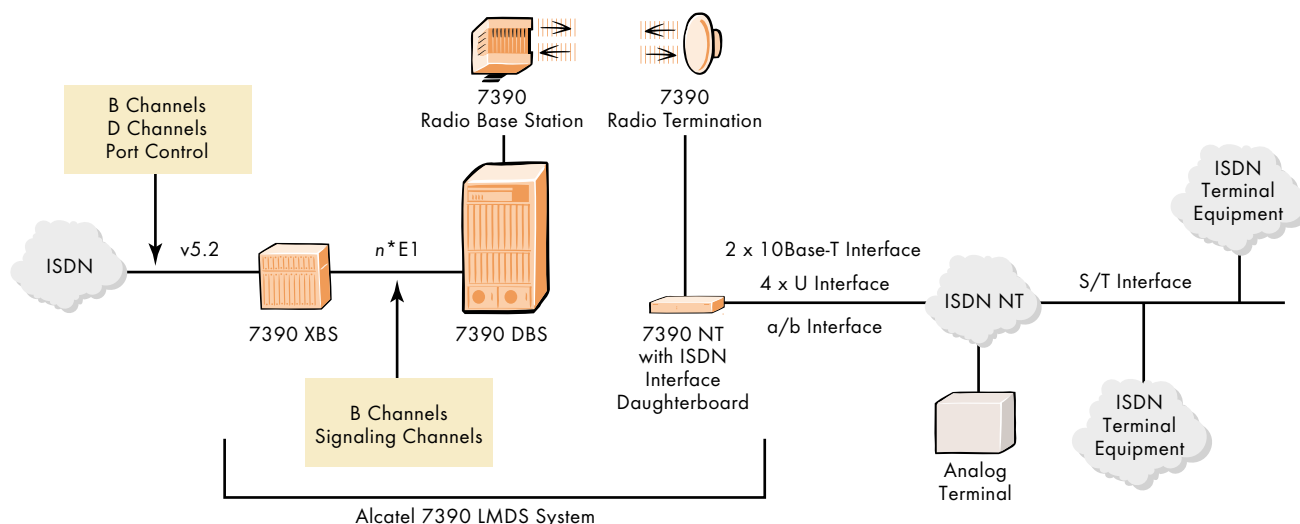
Providing
ISDN
Basic Rate
Interface
service



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3CL 00469 0104 TQZZA Ed.01

▼ Network architecture



A variety of interfaces for the end user

At the customer premises, the Alcatel 7390 LMDS Network Termination (NT) provides two 10Base-T ports, and a variety of other interfaces, such as four a2B+D port U interfaces, available in either ITU-T 2B1Q or German 4B3T standards. Up to four ISDN network terminations can then be connected to the 7390 NT to provide S/T and/or analog interfaces to ISDN customers at the Alcatel 7390 LMDS base station site.

On the LMDS Air interface, each ISDN BRI uses one time slot (TS) per B channel. For the D channels, one TS is reserved for concatenated signaling per Alcatel 7390 NT, for up to four ISDN BRI.

An Alcatel 7390 XBS can be connected to up to four 7390 DBSs, and up to four XBSs can be connected to one DBS. On one side, the XBS provides four E1 links toward the network, compliant with the v5.2 access protocol, and four E1 links toward up to four collocated or remotely located DBSs on the other. Up to four E1 links can be used for conveying ISDN BRI from one single 7390 DBS.

Operation and maintenance

Operation and maintenance for the Alcatel 7390 XBS is provided through a local operation and maintenance station (OMS) running on a PC through Windows NT. The OMS can be accessed locally or remotely, in both cases through an X.25 network. The remote OMS is able to manage up to 14 XBSs.

Technical Summary

ISDN BRI U Interface

- ▼ Layer 1: functional interface ETS 300 297 (based on ITU-T G.960); electrical interface ETR 080 (based on ITU-T G.961)
- ▼ Layer 2: data link EN 300 (based on ITU-T Q.920/Q.921)
- ▼ Layer 3: basic call control EN 300 403 (based on ITU-T Q.931)

Dimensions

- ▼ Alcatel 7390 XBS housing: indoor S9 shielded sub-rack which follows EMI/EMC Class B without shielded cabinet
- ▼ Height: 4 cm (1.56 in.)
- ▼ Width: 53.5 cm (20.9 in.)
- ▼ Depth: 2.2 cm (0.86 in.)

Power Consumption

- ▼ Nominal voltage: -48 V DC
- ▼ Maximum consumption: 48.5 W

