

Alcatel 1000 S12

A switching system that makes your business thrive



In the new telecom environment, whether you are an established player or a newcomer, your future profitability will depend on building a sustainable competitive advantage. To attain this objective, you will need innovative, differentiating characteristics.

The right partner is essential if you are to achieve these ambitious goals. We at Alcatel will help you to anticipate market trends. We will help you to gain a competitive advantage, not only by reducing your operating costs but by increasing your revenues too.



A world of innovative services

The richness of the services and features provided by the Alcatel 1000 S12 switching system helps you to achieve your ambitious goals. End-user services (such as number identification, call forwarding, multi-party capability, mobility and PBX access) and ISDN are equally important, because they help your business to flourish.

In addition, Alcatel offers a wide choice of special applications to increase the mobility of your customers.

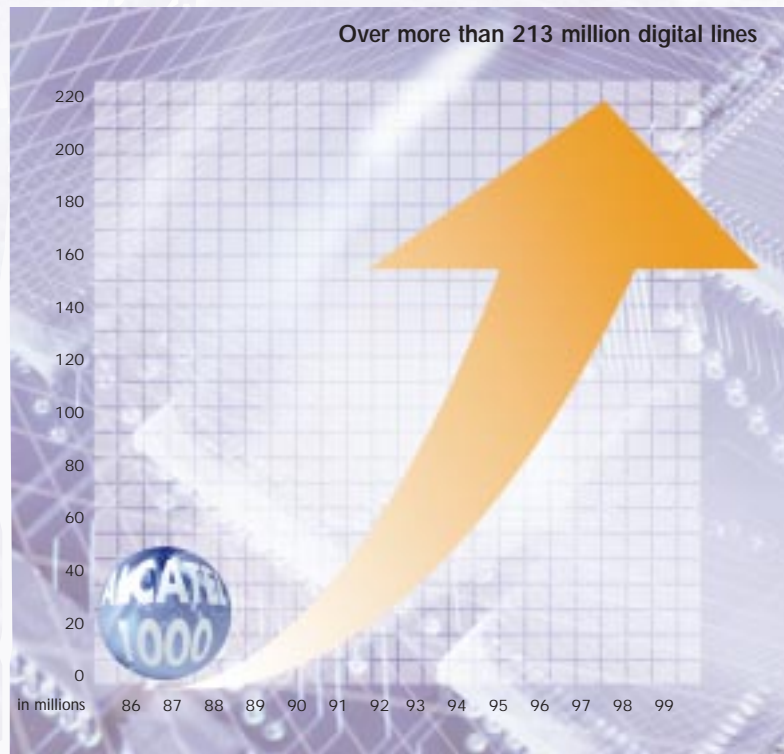


Examples of these are Intelligent Network services, GSM/DCS, recorded announcements and voice mail. Alcatel also offers innovative services and functions in many new domains such as multimedia and broadband. Operations and Maintenance (O&M) services and features make daily life easier and help minimize the ownership cost of your Alcatel 1000 S12 installed base.

More value to Internet users

The Alcatel 1000 S12 switching system is thriving in the new Internet era. An extra module added to the switch supports the Internet protocol (IP) and all the functions related to it. To help the end-user make use of the Internet in an efficient way, our switches support services such as Voice over IP (VoIP), Always-On/Dynamic ISDN (AO/DI) and ADSL.

Alcatel 1000, the roots of a flourishing business



Number of Alcatel 1000 terminations delivered over the past ten years

By early January 1999, Alcatel had already handed over more

than 213 million digital lines, including 140 million Alcatel 1000 S12 lines and 73 million Alcatel 1000 E10 lines. With this truly extensive installed base, we have earned the confidence and loyalty of more than 250 customers in 140 countries.

Moreover, the Internet can be used to update a subscriber's telephony profile in a very user-friendly way. This is achieved with the pioneering Personal Telecoms Manager.



The ISDN revolution

Operators worldwide are accelerating the roll-out of ISDN because it brings subscribers a whole new range of applications including videotelephony, videoconferencing, fast and "always-on" Internet access, multimedia, dial-up LAN-to-LAN connections, and flexible PBX interconnections. As far as Internet access is concerned, Alcatel 1000 switches are designed to be ready for AO/DI (Always-On/Dynamic ISDN). AO/DI offers the end-user low-cost "always-on" connectivity via ISDN to the Internet or to any other server.

It provides you, as well as ISPs and end-users with what's truly needed: bandwidth on demand, with minimal waste.

The Alcatel 1000 S12 switching system lets you upgrade your network progressively, from basic analog telephony via any mix of analog and ISDN to full ISDN capability, including the simultaneous deployment of ISDN and ADSL.



Upgrading to Intelligent Network

Alcatel is a pioneer in the provisioning of Intelligent Network infrastructures and applications. Our IN solutions provide the following major benefits:

- ▼ Rapid service development and deployment with no disruption of the network
- ▼ Tailoring of services to individual subscriber requirements
- ▼ Central service management
- ▼ Subscriber control of their own service profiles
- ▼ Interactive communication between service subscriber and service equipment

Centrex and Wide-Area Centrex

You can win a significant share of the private telecommunications market by adding Centrex functions to your public Alcatel 1000 S12 exchanges, enabling you to offer your business customers an extensive range of corporate network services. Your customers rent public phone lines and telephones from you, and you take over the operation and maintenance of their "private" networks, eliminating the need for them to make any long-term investment in PBX equipment.

Savings with the Integrated Switching Management Solution

Alcatel's Integrated Switching Management Solution (ISMS) is designed for centralized and multivendor management of all types of networks, including switching, access, transmission, and others. ISMS comprises a full set of applications and common modules covering the main management domains at both the network and network element layers. Availability of open and well-documented interfaces (TMN APIs) guarantees interoperability of ISMS with service and business management applications.

Evolving in three dimensions

Alcatel 1000: a truly future-safe solution

An Alcatel multifunctional exchange is a market-efficient tool for your competitive strategy. The Alcatel 1000 S12 switching system is evolving in three dimensions to become truly multifunctional.

First dimension




Fixed and mobility: The merging of wire-line services and wireless services on the same platform makes a lot of sense for operators licensed for both services. It is the logical and most economical way to implement alternative and global service offerings swiftly and capture market share fast. Exchange platforms that can support various wire-line and wireless services simultaneously are now in development and will very soon be the rule, rather than the exception.

Second dimension

System openness (switching and IT components): Via the Extended Peripheral Module (EPM), the Alcatel 1000 S12 accesses IT-based servers via an Ethernet LAN. Extensive use of IT servers transforms the Alcatel 1000 S12 into a truly "open" system. All non-real-time functions can be developed in a real commercial IT environment. This means that such software can be coded and tested anywhere – and by your own staff, for instance. But what's more, Alcatel 1000 operators can introduce new non-real-time software independently of major core software releases.

One example of an application is the Personal Telecoms Manager, which gives individual end-users direct access to the operator's service offer and their own personal subscriber profile. A user enters a designated Web site and makes on-line modification to service options – like destination of calls and e-mail, and voice mailbox preferences. Subscribers can even sign up for new services on-line. And, when commercially and economically justified, you can choose to run important real-time functions supported by Intelligent Network in the new IT server structure.



-  Auxiliary Control Elements
-  Control Element
-  Module

A switching system based on a unique distributed concept

The basic architecture of Alcatel 1000 S12 consists of a Digital Switching Network (DSN) connected to a variety of terminal modules. The DSN is a self-routing, virtually non-blocking switching system. It has a multi-stage and multi-plane architecture.

Terminal Control Elements (TCE), providing control logic and memory for the terminals, exist in each module. They communicate over the DSN via a standardized interface. Additional processing capacity is available from a pool of Auxiliary

Control Elements (ACE). The switching network consists of a regular array of identical digital switching elements which each incorporate all the necessary logic and memory needed for network control.

The switching network is purely hardware-controlled: there are no processors inside the DSN. An Alcatel 1000 S12 exchange is made of a subset of the modules, depending on what functions the operator wants the switch to perform. The number of modules is derived from the dimension of the office. Your market's particular characteristics as well as your service goals will determine which modules and functions are selected.

Third dimension

Narrowband and broadband capability:

As a third major dimension in the further evolution of the Alcatel 1000 S12 Multifunctional Platform, it will be possible to connect broadband links to any existing Alcatel 1000 S12 switching system. And the Alcatel 1000 S12 machine can serve as a platform for broadband services, including data streams.

And last but not least: Consulting

Alcatel can help you design an optimum network for your needs and select the most appropriate equipment. We can provide detailed implementation plans and we would be pleased to work with you on your business plans for your future operations.

The future

Whether you are a current or a potential new customer, Alcatel will be pleased to cooperate with you in building a network that will meet both your present and emerging needs. By working with you as your long-term partner, we can help you to meet the needs of your customers, helping them to prepare for the challenging future of interactive multimedia communications.



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