

COMMUNICATION SERVER INTEGRAL 55 LX



As a leading supplier of communication systems and services, Avaya designs, builds and manages communication networks for over one million companies worldwide. Our goal is to develop customized business communications, offering intelligent solutions to help you increase productivity and profitability. Which in turn allow you to focus on your core business concerns: growing your enterprise and enhancing your customer relationships.

The ideal platform for your converged communications

The Communication Server Integral 55 LX designed by Avaya marks a further milestone in converged business communications. The new platform creates the conditions for future-oriented, webbased communications, facilitates innovative applications via internet protocol, and reduces costs.

The tried and trusted Communication Server Integral 55 LX, designed throughout in standardized 19" technology, plays a central role. With its new integrated high-performance server blade and Linux operating system, the Communication Server Integral 55 LX is equipped with the very latest cutting-edge technology. Together

with extended capacities for digital signal processing that are essential for team networking and optimizing the deployment of resources. The Communication Server Integral 55 LX rounds off the high-performing Integral Communication Server family: Even the smallest branch offices with less than 10 subscribers can be linked up to headquarters or principal offices comprising up to 32,000 subscribers, and extended to form a standardized communication system. Mixed configurations of analog, digital, IP or DECT interfaces are possible at any time. Equally, uniform system management and user-friendly functions on the terminals are, of course, available.

Excellent quality and maximum performance, highest levels of accessibility, mobility and flexibility for your efficient business communications with Avaya!

Elementary modules of business communications

The Integral Communication Server family is backed up by experience gained from supplying far in excess of 100,000 Avaya communication systems to companies. The open architecture comprising VoIP, management and applications integration supports all common TC and IT standards and guarantees maximum scalability for various business structures.

Responding to the widest range of needs and application requirements, Avaya offers a customized, investment-protected solution for your entire communication needs: optimally implemented based on the Communication Server Integral 55 LX.

Overview of the principal benefits

- Maximum scalability for the widest range of business structures
- Optimal support of branch office structures
- Flexibility and modularity
- Standard 19" construction
- Highest packing density for ISDN and VoIP: least space requirement in the widest range of application scenarios
- Fully distributed system architecture with multi-processor control and central switching functions
- Integrated Call Server/Media Gateway architecture
- Integrated server blade with Intel Standard PC Design
- Hardened Linux operating system
- Comprehensive online service concept in line with BSI standards
- Optimized functions for on-site and remote maintenance services
- Integration of multimedia communications
- Multiservice platform for ISDN, DECT and VoIP
- Central telephone directory with LDAP link to databases
- PC-based switchboard with integration into workgroup systems
- Cost-efficient realization of ISDN, mixed or pure IP installations



Technologies ranging from ISDN to VoIP

Gentle migration or full conversion to a new world

The Communication Server Integral 55 LX can be deployed in pure ISDN systems, pure VoIP solutions or mixed environments, and can be extended in both directions at any time: A gentle, investment-protecting migration takes place in existing ISDN infrastructures. IP telephony functionality can be easily configured and used by VoIP subscribers and for VoIP networks. Comfortable IP telephones are recommended in the case of completely new installations. Interface cards can be used to optimally adapt the requisite conventional connections to the network operator or the analog and digital ports.

The ideal solution for branch office structures

Corporate networks often encompass one or more principal offices and numerous branch offices. Until now it was always necessary to deploy different systems in such branch office structures – which often resulted in friction losses in communication.

Here, too, the Integral Communication Server family ventures into innovative territory: Together with the Communication Server Integral 55 LX, the Communication Server Integral 55 Compact LX offers a solution as versatile as it is cost-efficient. Using the Communication Server Integral 55 Compact LX for the VoIP link-up of the branch offices' systems to the principal offices' systems – generally the Communication Server Integral 55 LX – creates a high-performance standardized communication network, with secure full communications functionality in the branch offices even if the WAN connection fails: If necessary, the branch offices' systems can work independently of the cross-locational data network (WAN) without the need to interrupt operations. Furthermore, the bandwidth requirements in the WAN are reduced to a minimum.

Uniform call number plans, comfortable features offered by QSIG protocols and the shared utilization of central facilities, such as call centers, unified messaging systems (UMS) and switchboard, facilitate your business processes, whilst at the same time reducing your maintenance and operating costs.



Communication Server Integral 55 LX – set-up and expansion flexibility

The Integral Communication Server family is a modular system comprised of standardized, self-contained components, which allows a limitless variety of configurations, depending on the application needs. The compact construction, high levels of availability and low energy consumption are made possible by the use of the latest cutting-edge technologies. The system can be extended at any time without any problems and without the need to replace existing components. Media Gateway and Call Server are housed in one 19" unit. This allows additional savings in operating costs, particularly in the case of small and medium-sized systems.

Communication Server Integral 55 LX

The Communication Server Integral 55 LX is suited for deployment in larger branch offices or principal offices. Built in uniform 19" technology, individual racks can be flexibly combined with each other: For example, a single module configuration can be compiled from up to 4 racks stacked on CAT6 cables.

In the case of larger configurations, the modules are interconnected by fiber optic cable and just distributed around the company premises. The choice between multimode or monomode fiber optic cables means that racks can be set up at distances of up to 15 km apart, ensuring optimal support for distributed campus installations or top-security requirements with distributed computer centers.

Communication Server Integral 55 Compact LX

This platform is based on the same innovative technology as its big brother, the Communication Server Integral 55 LX.

The Compact version is ideally suited as an efficient branch office solution – for between less than 10 and 240 IP subscribers. DECT can be integrated at any time, the modules are compatible with the Communication Server Integral 55 LX.

Conventional interfaces, such as those to the ISDN network operator or analog interfaces, for example for fax machines, are already included in the basic version, ensuring the rapid integration of the same into the existing branch office environment.

RJ45 sockets on the front ensure optimal integration into structured cabling systems. Because it takes up so little space and thanks to its compact 19" construction over 3 rack units, space can be found for the Communication Server Integral 55 Compact LX anywhere.

The highest levels of reliability and security

Individual communication solutions, which meet all requirements whilst at the same time guaranteeing the highest levels of security and reliability during operation, are possible with the Communication Server Integral 55 LX and Communication Server Integral 55 Compact LX.

The modular system architecture clearly separates internal and external interfaces, and the individual forms of communication from each other. The perfect interaction between the integrated Media Gateway function and the conventional interfaces, and the highly flexible protocol converters result in convincing and comprehensive security coverage.

Depending on the application, individual specifications with regard to availability can be incorporated down to the level of communication services and ports. In addition, an integrated firewall effectively protects the system against possible attacks.

Maximum availability for your solution

Crucial components and the control function of the Communication Server Integral 55 LX can be designed redundantly to ensure maximum availability of the system. The redundancy concept can be individually adapted to suit specific requirements.



Central functions, such as switching control, for example, are arranged in duplicate on different modules, which can also be spatially separated from each other. Furthermore, system-critical components, such as power supply units, can be set up redundantly within the racks. The individual modules function independently of each other and ensure the maximum levels of availability of the communication solution.

Increased access security

Access to the system and the utilization of specific features are governed by clearly defined authorization rights. These rights are assigned to individuals or groups, together with suitable authentication measures. Unauthorized attempts at access are denied and registered.

Secure communication across all borders

The “World Wide Web” has abolished all borders to state of the art communications, which is precisely why the communications platform and applications, such as Computer Telephony Integration (CTI), need to be protected accordingly. Avaya relies on the latest cutting-edge technologies, such as IPSec, SSL and HTTPS, which are based on acknowledged IT standards and therefore ensure comprehensive investment protection and future sustainability. Scalability and interoperability among the applications are guaranteed at all times.

Qualified security

IT security is absolutely essential for most companies. The German Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik, BSI) has published a manual on IT baseline protection, and these guidelines have become the standard for IT security. Avaya adheres to these high standards uncompromisingly. The logical result: BSI certification for “IT Baseline Protection – Self-Declaration with Certification” and a series of solution certifications for well-known TC/IT service providers.

From planning to installation to network management – everything from a single source

One of the crucial advantages of perfect communication solutions from a single source: Only having to talk to one competent, reliable and highly capable partner. Avaya assumes responsibility for the detailed planning, conscientious assembly and comprehensive service for your communication solution – including the relevant peripheral equipment. Furthermore, we will gladly assume responsibility, both for the detailed planning of the line network and the active network components, and for their installation and maintenance.



Prior to delivery, the components of the Communication Server Integral 55 LX are subjected to rigorous testing. The customer-specific data for the configuration of the system are loaded prior to handover. Amendments and enhancements can be performed at any time either on site or by remote maintenance service by the Avaya Service Center.

Automatic malfunction service

The ongoing automatic testing of all system components is a feature that is shared by all members of the Integral Communication Server family: malfunctions are detected immediately and reported by AIC (Automatic Information Call) to the Avaya Service Center. If necessary, the Service Center can then run additional diagnostics to produce a more accurate analysis. If a real malfunction has occurred, all interface cards can be replaced immediately during ongoing operation.

Trouble-free software adaptation

All of the components comprising the Avaya communication solution are equipped with upgradable software, thus eliminating any headaches when it comes to making any adaptations to changing requirements. The software is replaced quickly and easily, irrespective of whether it is for telephony applications, interface cards or terminals.

Comfortable network management

Both the Communication Server Integral 55 LX and the Communication Server Integral 55 Compact LX can be quickly and easily managed using the latest web technologies – both on site or remotely. Thanks to the Integral Easy Management and ADN Management applications, user definitions can be set up or changed simply and quickly – irrespective of whether ISDN, IP or DECT terminals are in use.

A high-performance terminal manager is additionally available for VoIP terminals, which noticeably simplifies the management, even of major installations, and helps to reduce costs. The VoIP terminals collect quality data relating to the primary parameters in realtime, thus supporting the management of converged networks. These extensive functions are available both on individual Integral Communication Servers and in major networks comprising complex branch office structures. Furthermore, Avaya offers Troubleshooting and Performance Management to monitor the utilization capacity of the system and to quickly analyze and resolve malfunctions.

Thanks to its LDAP interface, Central Data Management (CDM) provides simple and efficient data maintenance for the customer's databases, ensuring the consistency of the data across various applications and reducing operating costs.

About Avaya

Avaya enables businesses to achieve superior results by designing, building and managing their communications infrastructure and solutions. For over one million businesses worldwide, including more than 90 percent of the FORTUNE 500®, Avaya's embedded solutions help businesses enhance value, improve productivity and create competitive advantage by allowing people to be more productive and create more intelligent processes that satisfy customers.

For businesses large and small, Avaya is a world leader in secure, reliable IP telephony systems, communications applications and full life-cycle services. Driving the convergence of embedded voice and data communications with business applications, Avaya is distinguished by its combination of comprehensive, world-class products and services. Avaya helps customers across the globe leverage existing and new networks to achieve superior business results.

The Avaya logo consists of the word "AVAYA" in a bold, white, sans-serif font, with a stylized white line passing through the letters 'A', 'V', and 'Y'.

COMMUNICATIONS
AT THE HEART OF BUSINESS

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