✔ Product Overview

The Datalux CCSi2 AV Control Processor is a Powerful, single-core central control unit designed to manage and automate complex AV environments across conference rooms, classrooms, training centers, and control rooms. It serves as the brain of the AV system, enabling seamless integration of multiple devices such as displays, projectors, audio processors, switchers, lighting, and environmental controls through a unified network-based platform.

Equipped with multiple control interfaces including bidirectional RS-232/RS-422/RS-485 serial ports, IR/serial control, low-voltage relay ports, and digital I/O, it offers versatile connectivity for a wide range of AV and building management systems. A proprietary serial BUS ensures smooth expansion with Datalux accessories.

With 8 GB flash memory and 1 GB SDRAM, the processor delivers reliable, high-speed performance for handling multiple simultaneous control tasks. Its dual Gigabit Ethernet ports support up to 40 connected devices and offer compatibility with secure network protocols such as HTTPS, SSH, SSL/TLS, SNMP, and IEEE 802.1X for enterprise-grade security.

A built-in or external IR learner allows the capture of IR commands for custom device control. The processor works seamlessly with the Datalux touch panels and button panels, ensuring a fully integrated control solution over a standard IP network.

Technical Parameter

Specification	Details
General	Powerful single core AV control processor featuring dedicated control ports, enhanced security protocols, and high speed Gigabit Ethernet connectivity. Ensures full interoperability with touch control panels and button panels via standard network systems. Supplied with the necessary AV control software perpetual license.
Touch Panel & Button Panel Support	Fully compatible with Datalux touch panels, button panels.
Memory	8 GB flash memory, 1 GB SDRAM
Ethernet Ports	2 x 10/100/1000Base-T Ethernet ports, half/full duplex with autodetect, for monitoring and control of up to 40 devices.
Supported Ethernet Protocols	HTTP, HTTPS, ICMP, IEEE 802.1X, DHCP, DNS, TCP/IP, UDP/IP, NTP, SFTP, SMTP, SNMP, SSH/SSL/TLS
Serial Ports	2 x bidirectional RS-232 ports 2 x bidirectional RS-232/RS-422/RS-485 ports. Supports baud rates from 300 to 115200, 8 or 7 data bits, 1 or 2 stop bits, and no parity/even/odd. Hardware/software flow control supported.
Digital I/O Ports	4 x configurable digital I/O ports, supporting 0–24 VDC inputs (39 kΩ impedance, clamped at +35 VDC), 250 mA sink output from 24 VDC max. Programmable pull-up to +5 VDC.
IR / Serial Control Ports	2 x IR/Serial control ports Programmable unidirectional RS-232 (±5 V) or TTL-level (0 – 5 V) infrared (carrier/non-carrier) up to 350 kHz. Built-in IR learner with 30–350 kHz learning frequency, capture distance 5–35 cm.
Low Voltage Relay Ports	4 x normally open low-voltage relay ports; rated 24 VDC, 1 A.
Event Scheduling	Real-time clock with NTP synchronization for timed macros and automation events.
Macro & Script Execution	Supports custom macros, conditional logic, and event-triggered automation using OEM scripting environment.
Device Management	Integrated web interface for configuration, monitoring, and firmware updates.
Remote Access	Secure remote login for off-site troubleshooting and configuration.
Fail-Safe Operation	Non-volatile memory backup for program and settings retention in case of power loss.
Multi-Room Control	Capable of managing multiple rooms/zones independently over the same network.
Proprietary Serial Bus for expansion	1 x proprietary bus (for Datalux accessories); 1x standard interfaces available for third-party devices.
IR Learner	Built-in IR learner to capture IR commands.
Integration Compatibility	Supports integration with third-party devices via serial, IP, IR, or contact closure.
Firmware Update	Upgradable via network, USB
Logging & Monitoring	System activity logging with export capability; SNMP support for enterprise monitoring systems.
Redundancy Option	Optional dual power supply, redundant network interface configuration for mission-critical applications.

Switched DC Power Output	4 switched 12 VDC outputs, maximum 40 W total.
Power Supply	Internal, 100–240 VAC, 50–60 Hz. Power consumption up to ~62 W full load.
Cooling	Convection cooled, no vents.
Compliance	CE, RoHS, FCC
Thermal Dissipation	~28 BTU/hr (full load).
Operating Temperature	0 °C to +55 °C.
Storage Temperature	−40 °C to +65 °C.
Humidity	10% to 90%, non-condensing (operating and storage).
Mounting	Rack-mountable with optional rack shelf.
Enclosure Type	Metal.
Dimensions (H×W×D)	45 mm × 224 mm × 267 mm
Weight	Approx. 5.7 kg