KSS – NETWORK SYSTEM CARD

FEATURES

- Up to 32 subsystems in network
- Redundancy of transmision path
- Optional Star topology
- No significant audio signal delays between subsystems
- Full synchronisation of messages between subsytems
- Galvanically isolated circuits
- Digital comunication
- Maximum connection length between subsystems 500 m
- Ultra-low quiescent mode
- Hot-swap functionality
- Overvoltage, overcurrent and short circuit protection

CNBOP-PIB

Certificate of constancy of performance 1438-CPR-1077
Certificate of admittance 5641/2025

OVERVIEW

The KSS card enables communication between two KG-ETH main controllers, whether located in the same facility or at separate sites, forming an integrated networked system. It can be installed in either KG-ETH or KAS units.

Communication is based on the RS485 protocol. Connections can be made via copper cables in point-to-point or daisy-chain topology, or via fiber optic cables in a ring topology using KSSO converters.

In standard fiber optic configurations, the KSS card supports simultaneous transmission of system commands, status signals, and a single audio channel.

The card can operate in one of two modes: MASTER (transmitter) or SLAVE (receiver). Communication from MASTER to SLAVE includes control commands, system status information, and audio signals. Return communication from SLAVE to MASTER is limited to general fault notifications — no other data is transmitted upstream.

Due to RS485 protocol limitations, only one KSS card within a network can function as a MASTER. If bidirectional transmission (e.g., control or audio from both KG-ETH units) is required, the system must be duplicated — including network infrastructure, devices, and cabling — in each KG-ETH unit or rack cabinet intended to serve as a signal transmitter.

pAudio Technologies Sp. z o.o.
ul. Majowa 2, 71-374 Szczecin, Poland
Tel.: +48 91 311 38 75
paudio@paudio.pl, www.paudio.pl

TECHNICAL SPECIFICATION

GENERAL	
Power supply	24 V DC ± 20 % 48 V DC ± 15 %
Idle consumption	< 0,7 W
Standards	EN54, CE
Mechanical	3 U, 4 HP
Operating temperature	-5 : +50 °C
Relative humidity	25 % - 90 %
Indicators	ID, power
Connectors	2x terminal block (digital BUS)

AUDIO SPECIFICATION	
Frequency response	10 Hz - 30 kHz (- 3 dB)
Distortion (THD + N) (1 kHz)	< 0,1 %
Signal-to-noise ratio	> 86 dB

OTHERS	
Communication delay	< 10 ms
Digital audio format	PCM 16-bit / 48 kHz

pAudio Technologies Sp. z o.o.
ul. Majowa 2, 71-374 Szczecin, Poland
Tel.: +48 91 311 38 75
paudio@paudio.pl, www.paudio.pl