

DMC14 /02

Degraded Mode Controller - DANTE version

Data sheet



- Redundant unit for Bosch Praesideo Public Address.
- Fully compatible with Bosch OMNEO Audio interface.
- 2U Standard Rack EIA.
- Digital audio based on Dante™ interface.
- Direct drive the Bosch amplifier.
- Redundant network connection.
- Microphone for immediate announcements
- Status Led

Degraded Mode Controller DMC overview

The Degraded Mode Controller DMC14/02 Dante version unit is useful to redundant Bosch Praesideo Public Address OMNEO based.

The unit can be used in a Bosch Praesideo Public Address architecture to make PA announcements when the main Bosch network controller and/or OMNEO interface fail.

For example in a railway station the DMC can be used as redundant unit for the main network controller in a PA architecture.

Operating modes

The unit can broadcast live messages from front panel microphone and digital audio streaming network.

When the main Bosch network controller and/or main OMNEO interface fail local operators can again make general announcements using the microphone of the DMC unit and remote operators can make announces using Ethernet network.

The streaming audio IP is based on Dante™ protocol and can be used by Bosch OMNEO audio interfaces to make announcements from remote control center (OCC) when the main Bosch network controller and/or main OMNEO interface fail. The DMC unit can be also managed by DAM8800 server or by dedicated remote console.

In order to increase the efficiency of the redundancy, DMC unit must be connected to a second LAN, so the unit can be used to broadcast announcement from remote center if the primary IP network fail.

The unit is equipped with a Bosh kit so it can connected directly to Praesideo bus and can drive the audio amplifier without the main network controller.

Operating modes

The DMC unit must connected, with Praesideo bus, to the associated network controller and audio amplifier.

The IP interfaces can be connected to the primary IP network or, to increase the efficiency of the redundancy, a secondary IP network.

Power Requirements

The DMC unit can be powered by an external 16-48Vdc supply. Maximum power requirement is 12W

The DMC can generate the following fault alarms:

- Power fault - when a fault of power input occurs.
- Praesideo system fault - when a Bosch network report a fault
- Dante error – when the Bosch OMNEO network report a fault.

These faults are available through cumulative dry output contact.

Ideas s.r.l.

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Degraded Mode Controller DMC14/02

Technical Specification

Mechanical

Standard rack 19" – 2U
88x483x300mm (HxWxD)
IP Protection rate: IP54

Electrical

Power Supply 24VDC nominal
 (DMC14/02-24 version)
 48VDC nominal
 (DMC14/02-48 version)

Max power consumption 12W

Interfaces

Nr. 2 LAN ports RJ45
Nr. 2 Praesideo bus ports

IN/OUT

Nr. 2 isolated digital input
Nr. 2 dry contact output

Protocol

DANTE/OMNEO

Analog audio inputs

Nr.2 analog audio inputs:

Impedance: 600Ohm balanced and isolated
Maximum level: +6dBV

Analog audio outputs

Nr.2 analog audio outputs:

Impedance: 600Ohm balanced and isolated
Maximum level: +6dBV

Controls

Digital volume adjusting

Environmental condition

Operating temperature range: -5 to +55 °C
Storage temperature range: -40 to +70 °C
Humidity 15% to 90%
Air pressure 600 to 1100hPa

Color

Front panel: black anodized aluminum
Rack: clear galvanized

MTBF

50,000 hours at +55 °C
(The MTBF doubles for every 10 °C decrease in temperature)

Certification

Electromagnetic compatibility:
EN55103-1/FCC-47 part 15B
EN55103-2
EN50121-4
EN50130-4
Fast transients immunity:
During fast transients bursts according to EN61000-4-4, the OMNEO audio signal might be lost. After the burst, this signal restores automatically.
Electrical safety:
IEC60065 (CB-scheme)
EN60065
Approvals:
CE marking

Ordering information

DMC14/02-24 version for power supply 24VDC
DMC14/02-48 version for power supply 48VDC