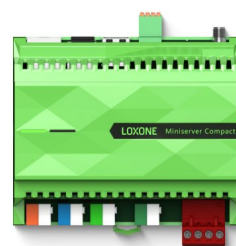


## Datasheet

### Miniserver Compact

Part No: 100512



#### About the product

The high-performance LOXONE Miniserver Compact in a **compact design** - especially for smaller distribution boxes. The Miniserver Compact has the **LOXONE Air, Tree and Tree Turbo technology** already built in and the **software of the Audioserver** integrated. This makes it a multimedia all-rounder.

#### Features:

- 4 digital inputs
- 2 digital relay outputs, potential-free
- LOXONE Link, switchable to Tree in software: up to 30 Extensions or 50 Tree devices
- LOXONE Tree: up to 50 Tree devices
- LOXONE Tree Turbo: up to 10 Tree Turbo devices
- LOXONE Air: up to 128 Air devices

#### Electrical Specifications

|                         |                                        |
|-------------------------|----------------------------------------|
| Power Supply            | 10 ... 30VDC (Relays work above 19.2V) |
| Power consumption       | typ. 2.4W, max. 4.3W                   |
| Power loss at max. load | 8.4W                                   |
| Max. inrush current     | 24 A                                   |

#### Technical Data

|                                 |                                                                                                                                                                                                                               |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Digital Inputs                  | <p>4 digital inputs: logic 0: 0 ... 2.2V undefined: 2.3 ... 4.9V logic 1: 5 ... 24V<br/> <math>R_i = 45k\Omega</math></p> <p>useable as frequency counter: frequency: 1 ... 500Hz min. pulse width: 2ms accuracy: +/- 1Hz</p> |
| Relay Outputs                   | <p>2 digital relay outputs, dry contact</p> <p>250VAC 16A* at <math>\cos \phi = 1</math> or 30VDC 16A*</p> <p>*Load &gt; 12A: 2.5mm<sup>2</sup> / AWG12</p>                                                                   |
| Power reserve of internal clock | 64 hours                                                                                                                                                                                                                      |

## Interfaces

|                   |                                                                                                                                                                                                                                                                                 |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LOXONE Link       | Switchable to Tree in software: up to 30 Extensions or 50 Tree devices, max. 500m                                                                                                                                                                                               |
| LOXONE Tree       | Connection: up to 50 Tree devices<br>Wire length: max. 500m                                                                                                                                                                                                                     |
| LOXONE Tree Turbo | up to 10 Tree Turbo devices, max. 150 m                                                                                                                                                                                                                                         |
| LOXONE Air        | up to 128 Air devices 868MHz (SRD Band Europe), 4 channels, max. 15.1mW e.r.p. 915MHz (ISM Band Region 2), 10 channels, max. 13.2mW<br>Compatible LOXONE antennas:<br>SMA Stub Antenna 868 MHz (000200)<br>SMA Rod Antenna 4dBi 868MHz (200151)<br>SMA Antenna 868 MHz (200048) |
| Ethernet          | 100Mbps, IPv4/IPv6, HTTPS, SSL/TLS<br>TCP/IP, Modbus TCP, UDP                                                                                                                                                                                                                   |
| USB               | USB 2.0: Type A, max. 500mA                                                                                                                                                                                                                                                     |

## Ambient Conditions

|             |                               |
|-------------|-------------------------------|
| Temperature | 0 ... 50 °C / 32 ... 122 °F   |
| Humidity    | max. 95 % RH (non-condensing) |

## Music Playback

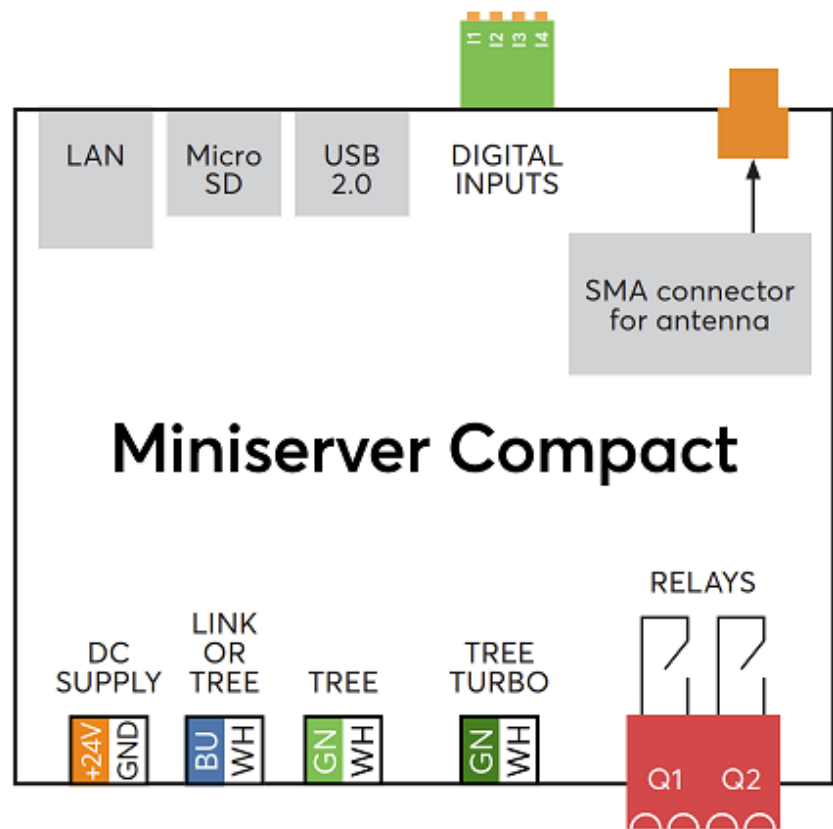
|                             |                                                                                                                                                  |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Streaming                   | AirPlay 2, Spotify, TuneIn, internet streaming services, NAS                                                                                     |
| Compatible USB Drives       | USB Flash drives: FAT32/NTFS, single partition, max. 2TB<br>USB Harddrives: FAT32/NTFS, single partition, max. 2TB, max. 500mA power consumption |
| Audio-filetypes Sample rate | MP3, AAC, ALAC, Flac, WMA, WMA lossless, WAV, M4A, OGG up to 192kHz                                                                              |

## Connection Terminals

|                        |                                                                                                                                                                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Terminal type          | DC Supply, Link, Tree, Tree Turbo: DG220B; copper/aluminium, solid wire only<br>Digital Inputs: FMC 0.5; copper/aluminium, solid wire only<br>Relay Outputs: MSTB 2.5 HC                                                                      |
| Wire cross-section     | DC Supply, Link, Tree, Tree Turbo: 0.28 ... 0.8mm <sup>2</sup> AWG23 ... 18<br>Digital Inputs: 0.14 ... 0.5mm <sup>2</sup> AWG26 ... 20<br>Relay Outputs: 0.2 ... 2.5mm <sup>2</sup> / AWG24 ... 12<br>Load > 12A: 2.5mm <sup>2</sup> / AWG12 |
| Stripping length       | DC Supply, Link, Tree, Tree Turbo: 5 ... 6mm 0.2 ... 0.24"<br>Digital Inputs: 7mm / 0.28"<br>Relay Outputs: 7mm / 0.28"                                                                                                                       |
| Tightening torque      | DC Supply, Link, Tree, Tree Turbo: -<br>Digital Inputs: -<br>Relay Outputs: 0.5 ... 0.6Nm / 0.37 ... 0.44 lbf ft                                                                                                                              |
| Temperature resistance | DC Supply, Link, Tree, Tree Turbo: -40 ... 105°C / -40 ... 221°F<br>Digital Inputs: -40 ... 70 °C / -40 ... 158°F<br>Relay Outputs: -40 ... 70 °C / -40 ... 158°F                                                                             |

## Connection Diagram

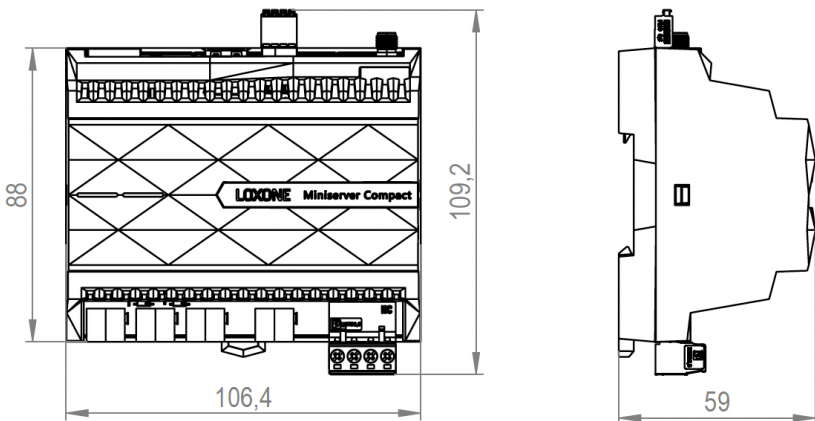
Connection Diagram



## Product Characteristics

|               |                                       |
|---------------|---------------------------------------|
| Mounting type | DIN rail according to EN 50022, 35 mm |
| Colours       | Green: RAL 6018                       |
| Finish        | Matte                                 |

## Weight & Dimensions

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Net weight                 | 170 g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Total weight               | 220 g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product dimensions         | 106.4x88x59mm / 4.19x3.46x2.32" (LxWxH), 6 division units                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Product dimensions drawing |  <p>The drawing shows two views of the LUXONE Miniserver Compact. The front view on the left shows a rectangular unit with a width of 106,4 mm and a height of 88 mm. The side view on the right shows a depth of 59 mm and a total height of 109,2 mm. The unit is labeled 'LUXONE Miniserver Compact' and features a DIN rail mounting bracket on top and a terminal block on the bottom right.</p> |
| Pack size                  | 122x116x63 / 4.80x4.57x2.48" (LxWxH)                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Certifications & Standards

|                                          |                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operation                                | Type 1 (UL 60730-1, CSA E 60730-1)                                                                                                                                                                                                                                                                                                               |
| Rated impulse voltage for digital output | 4 kV (UL60730-1, max. Altitude 2000m)                                                                                                                                                                                                                                                                                                            |
| Degree of pollution                      | 2                                                                                                                                                                                                                                                                                                                                                |
| Software class                           | A                                                                                                                                                                                                                                                                                                                                                |
| Certifications                           | UL 60730-1<br>CSA E60730-1<br>IEC 60730-1                                                                                                                                                                                                                                                                                                        |
| Certifications                           |     |

Installation must be carried out by a qualified electrician in accordance with the relevant regulations.

**Published by**

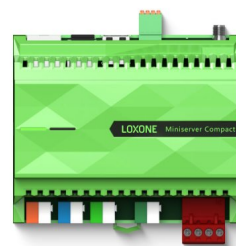
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# Datenblatt

## Miniserver Compact

Part No: 100512



### Über das Produkt

Der hochperformante Miniserver Compact in **kompakter Bauweise** – speziell für kleinere Verteilerkästen. Der Miniserver Compact hat die **Air, Tree und Tree Turbo Technologie** bereits verbaut sowie die **Software des Audioservers** integriert. Somit wird er zum Multimedia-Alleskönner.

#### Features:

- 4 digitale Eingänge
- 2 digitale Relaisausgänge, potentialfrei
- LOXONE Link, umschaltbar auf Tree in Software: bis zu 30 Extensions oder 50 Tree Geräte
- LOXONE Tree: bis zu 50 Tree Geräte
- LOXONE Tree Turbo: bis zu 10 Tree Turbo Geräte
- LOXONE Air: bis zu 128 Air Geräte

### Elektrische Spezifikationen

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| Spannungsversorgung           | 10 ... 30VDC (Relais arbeiten oberhalb 19,2V) |
| Leistungsaufnahme             | typ. 2.4W, max. 4.3W                          |
| Verlustleistung bei max. Last | 8.4W                                          |
| Max. Einschaltstrom           | 24 A                                          |

### Technische Daten

|                              |                                                                                                                                                                                                                  |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Digitale Eingänge            | 4 digitale Eingänge: logisch 0: 0 ... 4,5VDC undefined: 4,6 ... 5,9VDC<br>logic 1: 6 ... 30VDC $R_i=45k\Omega$<br>als Frequenzzähler verwendbar: Frequenz: 1 ... 500Hz min. Pulsbreite: 2ms Genauigkeit: +/- 1Hz |
| Relais Ausgänge              | 2 digitale Relaisausgänge,<br>potentialfrei: 250VAC 16A* at $\cos \varphi=1$ or 30VDC 16A*<br>*Last > 12A: 2,5mm <sup>2</sup> / AWG12                                                                            |
| Gangreserve der internen Uhr | 64 Stunden                                                                                                                                                                                                       |

## Schnittstellen

|                   |                                                                                                                                                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LOXONE Link       | umschaltbar auf Tree in Software: bis zu 30 Extensions oder 50 Tree Geräte, max. 500m                                                                                                                                                                                                 |
| LOXONE Tree       | Anschluss: bis zu 50 Tree-Geräte<br>Kabellänge: max. 500 m                                                                                                                                                                                                                            |
| LOXONE Tree Turbo | bis zu 10 Tree Turbo Geräte, max. 150 m                                                                                                                                                                                                                                               |
| LOXONE Air        | bis zu 128 Air Geräte 868MHz (SRD Band Europe), 4 Kanäle, max. 15,1mW e.r.p. 915MHz (ISM Band Region 2), 10 Kanäle, max. 13,2mW<br>Kompatible LOXONE Antennen:<br>SMA Antenne mit Kippgelenk 868 MHz (000200)<br>SMA Stabantenne 4dBi 868MHz (200151)<br>SMA Antenne 868 MHz (200048) |
| Ethernet          | 100Mbps, IPv4/IPv6, HTTPS, SSL/TLS<br>TCP/IP, Modbus TCP, UDP                                                                                                                                                                                                                         |
| USB               | USB 2.0: Typ A, max. 500mA                                                                                                                                                                                                                                                            |

## Umgebungsbedingungen

|                  |                                       |
|------------------|---------------------------------------|
| Temperatur       | 0 ... 50 °C / 32 ... 122 °F           |
| Luftfeuchtigkeit | max. 95 % r. F. (nicht kondensierend) |

## Musikwiedergabe

|                                |                                                                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Streaming                      | AirPlay 2, Spotify, TuneIn, Internet Streaming Dienste, NAS                                                                          |
| Kompatible USB Datenträger     | USB Sticks: FAT32/NTFS, eine Partition, max. 2TB<br>USB Festplatten: FAT32/NTFS, eine Partition, max. 2TB, max. 500mA Stromverbrauch |
| Audio-Dateiformate Sample rate | MP3, AAC, ALAC, Flac, WMA, WMA lossless, WAV, M4A, OGG bis zu 192kHz                                                                 |

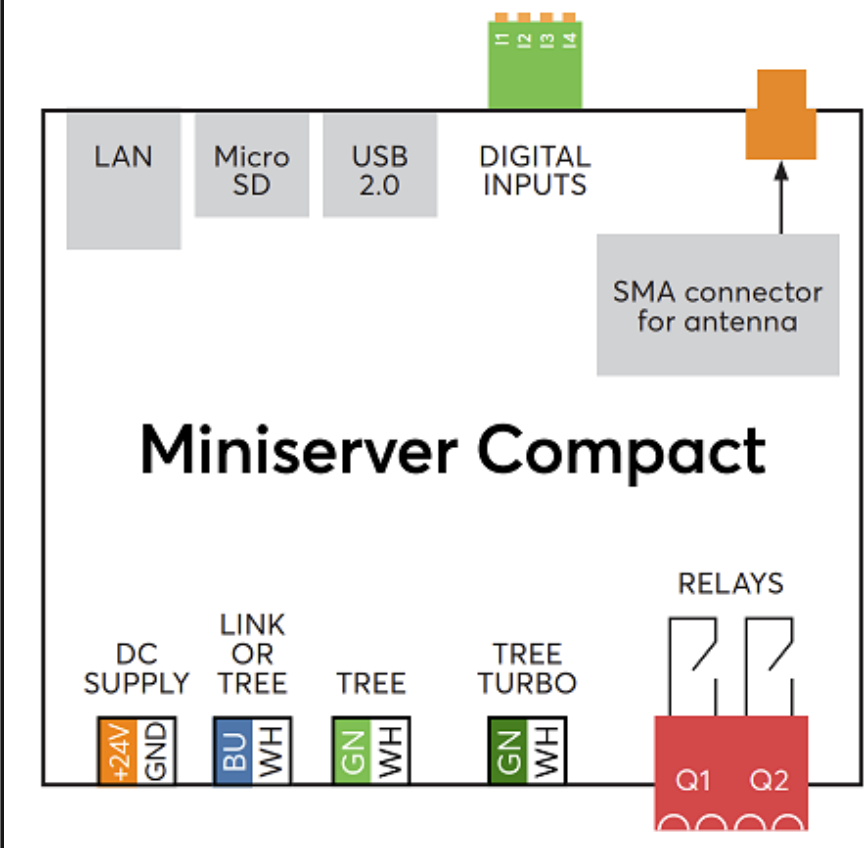
## Anschlussklemmen

|                         |                                                                                                                                                                                                                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Klemmentyp              | <p>DC Versorgung, LOXONE Link, Tree, Tree Turbo: DG220B;<br/>Kupfer/Aluminium, nur massiver Draht</p> <p>Digitale Eingänge: FMC 0,5; Kupfer/Aluminium, nur massiver Draht</p> <p>Relais Ausgänge: MSTB 2,5 HC</p>                                                                   |
| Leiterquerschnitt       | <p>DC Versorgung, LOXONE Link, Tree, Tree Turbo: 0,28 ... 0,8mm<sup>2</sup><br/>AWG23 ... 18</p> <p>Digitale Eingänge: 0,14 ... 0,5mm<sup>2</sup> AWG26 ... 20</p> <p>Relais Ausgänge: 0,2 ... 2,5mm<sup>2</sup> / AWG24 ... 12</p> <p>Last &gt; 12A: 2,5mm<sup>2</sup> / AWG12</p> |
| Abisolierlänge          | <p>DC Versorgung, LOXONE Link, Tree, Tree Turbo: 5 ... 6mm 0,2 ... 0,24"</p> <p>Digitale Eingänge: 7mm / 0,28"</p> <p>Relais Ausgänge: 7mm / 0,28"</p>                                                                                                                              |
| Anzugsdrehmoment        | <p>DC Versorgung, LOXONE Link, Tree, Tree Turbo: -</p> <p>Digitale Eingänge: -</p> <p>Relais Ausgänge: 0,5 ... 0,6Nm / 0,37 ... 0,44 lbf ft</p>                                                                                                                                     |
| Temperaturbeständigkeit | <p>DC Versorgung, LOXONE Link, Tree, Tree Turbo: -40 ... 105°C / -40 ... 221°F</p> <p>Digitale Eingänge: -40 ... 70 °C / -40 ... 158°F</p> <p>Relais Ausgänge: -40 ... 70 °C / -40 ... 158°F</p>                                                                                    |



Anschlussplan

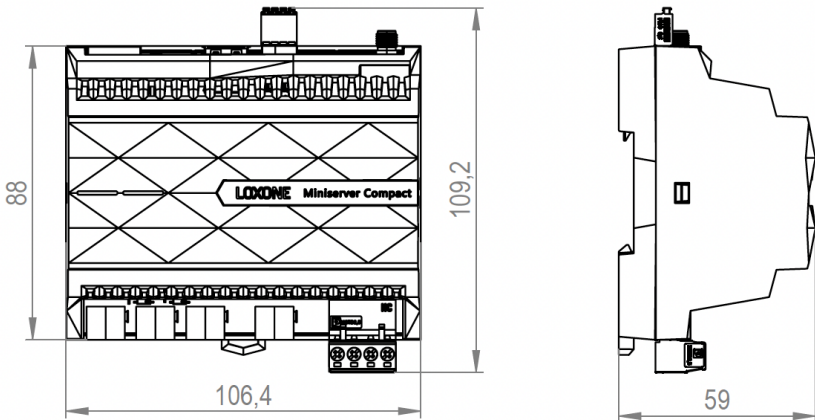
Anschlussplan



Produkteigenschaften

|            |                                |
|------------|--------------------------------|
| Montageart | Hutschiene nach EN50022, 35 mm |
| Farbe      | Grün: RAL 6018                 |
| Glanzgrad  | Matt                           |

## Gewicht & Abmessungen

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nettogewicht        | 170 g                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Bruttogewicht       | 220 g                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Produktmaße         | 106,4x88x59mm / 4,19x3,46x2,32" (LxBxH), 6 Teilungseinheiten                                                                                                                                                                                                                                                                                                                                                                    |
| Produktmaßzeichnung |  <p>The technical drawing shows two views of the Loxone Miniserver Compact. The front view on the left indicates a width of 106,4 mm and a height of 88 mm. The side view on the right indicates a depth of 59 mm. The total height including the top and bottom sections is 109,2 mm. The device is labeled 'LOXONE Miniserver Compact'.</p> |
| Packmaß             | 122x116x63 / 4.80x4.57x2.48" (LxWxH)                                                                                                                                                                                                                                                                                                                                                                                            |

## Zertifizierungen & Standards

|                                           |                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Einsatzgebiet                             | Typ 1 (UL 60730-1, CSA E 60730-1)                                                                                                                                                                                                                                                                                                                |
| Bemessungsspannung der digitalen Ausgänge | 4 kV (UL60730-1, max. Altitude 2000m)                                                                                                                                                                                                                                                                                                            |
| Verschmutzungsgrad                        | 2                                                                                                                                                                                                                                                                                                                                                |
| Software Klasse                           | A                                                                                                                                                                                                                                                                                                                                                |
| Zertifizierungen                          | UL 60730-1<br>CSA E60730-1<br>IEC 60730-1                                                                                                                                                                                                                                                                                                        |
| Zertifizierungen                          |     |

Die Installation muss von einer qualifizierten Elektrofachkraft gemäß den einschlägigen Vorschriften durchgeführt werden.

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