## 5.1 ComatReleco Messaging System

### CMS-10R-DAC

4 analogue / digital inputs | 2 inputs 4 ... 20 mA | 4 relay outputs | 12 ... 48 V DC

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### Power supply
- Nominal voltage: 12 ... 48 V DC
- Operating voltage range: 8.4 ... 60 V DC
- Maximum power consumption DC: 13 W
- Typical power consumption DC: 5 W

### Inputs
- Number of analogue current inputs: 2
- Number of analogue / digital voltage inputs: 4
- Nominal voltage digital inputs: 12 ... 48 V DC
- Logic high level digital inputs: > 9.5 V DC
- Nominal range analogue inputs: 0 ... 10 V (I1 - I4) / 4 ... 20 mA (I5 - I6)
- Resolution of analogue inputs: 12 Bit
- Sampling rate: 10 Hz

### Outputs
- Number of relay outputs: 4
- Contact type: CO
- Contact material: AgNi
- Rated voltage: 250 V AC
- Maximum switching voltage: 400 V AC
- Rated current: 10 A
- Minimum contact load relay outputs: 10 mA, 12 V
- Inrush current: 80 A, 20 ms
- Rated load AC-1: 3 kVA
- Electrical endurance at rated load AC-1: > 30 000

### Communication
eSIM
- Included
- Communication standards:

- Coverage Z1: Worldwide
- Frequency bands Z2
  - E-GSM: B3, B8 | E-UTRA: B1, B8 | LTE-FDD: B1, B3, B7, B8, B20, B28A
- Coverage Z2: Europe, Middle East, Africa, South Korea, Thailand
- Frequency bands Z2
  - E-GSM: B3, B8 | E-UTRA: B1, B8 | LTE-FDD: B1, B3, B7, B8, B20, B28A

- Antenna connector: SMA female
- Antenna impedance: 50 Ω
- Antenna return loss: > 10 dB

### Insulation
- Insulation type: Reinforced
- Insulation rating between all ports: 2 kV / 1 min
- Pollution degree: 2
- Overvoltage category: II

### General data
- Ambient temperature storage (no ice): -40 ... 85 °C
- Ambient temperature operation: -25 ... 70 °C
- Conductor cross section: 2.5 mm² (Stand) / 4 mm² (Wire)
- Nominal screw torque: 0.5 Nm
- Weight: 260 g
- Protection degree: IP20
- Housing material: PA / PC

### Product reference

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
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<td>CMS-10R-DAC/DC…V-Z2-KIT1</td>
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</tbody>
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"..." list control circuit voltage to complete product references.

### Accessories

Additional accessories: See chapter 5.2