

**WAVESERIES**  
**WDS2 RS232/TTY****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

D-32758 Detmold

Germany

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The constantly increasing demand for automation technology means that ever larger amounts of data have to be processed.

A highly diverse range of interface converters in serial and digital form are used in such instances.

They are primarily used to adapt different data protocols and for converting analogue signals into digital ones or vice versa.

**General ordering data**

|            |                                 |
|------------|---------------------------------|
| Type       | WDS2 RS232/TTY                  |
| Order No.  | <a href="#">8615690000</a>      |
| Version    | Interface converter, RS232, TTY |
| GTIN (EAN) | 4032248277681                   |
| Qty.       | 1 pc(s).                        |

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## Technical data

### Dimensions and weights

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Length     | 92.4 mm  | Length (inches) | 3.638 inch |
| Width      | 22.5 mm  | Width (inches)  | 0.886 inch |
| Height     | 112.4 mm | Height (inches) | 4.425 inch |
| Net weight | 149 g    |                 |            |

### Temperatures

|                             |              |                             |                |
|-----------------------------|--------------|-----------------------------|----------------|
| Operating temperature, max. | 55 °C        | Operating temperature, min. | 0 °C           |
| Storage temperature, max.   | 85 °C        | Storage temperature, min.   | -20 °C         |
| Operating temperature       | 0 °C...55 °C | Storage temperature         | -20 °C...85 °C |

### Probability of failure

|      |           |
|------|-----------|
| MTTF | 419 Years |
|------|-----------|

### Interface 1

|            |                                    |                 |                    |
|------------|------------------------------------|-----------------|--------------------|
| Assignment | DTE/DCE switchable with DIP switch | Connection type | SUB-D9 (male plug) |
|------------|------------------------------------|-----------------|--------------------|

### Interface 2

|                       |                                     |                       |             |
|-----------------------|-------------------------------------|-----------------------|-------------|
| Bit delay             | ≤ 3 µs                              | Bit distortion        | < 1.5%      |
| Load                  | ≤ 500 Ω                             | Shield connection     | KLBÜ 4-6/Z1 |
| Status indicator      | LED green: supply voltage, TxD, RxD | Transmission channels | Full-duplex |
| Transmission distance | Max. 1000 m twisted pair            | Transmission rate     | 19.2 kBit/s |

### General data

|                    |                |                                             |                |
|--------------------|----------------|---------------------------------------------|----------------|
| Configuration      | DIP switch     | Current-carrying capacity of cross-connect. | ≤ 2 A          |
| Galvanic isolation | 3-way isolator | Power consumption                           | ca. 0.8 W      |
| Rail               | TS 35          | Voltage supply                              | 24 V DC ± 20 % |

### Insulation coordination

|                                |                                                                            |                                           |                                                                                      |
|--------------------------------|----------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------|
| Clearance & creepage distances | Between neighbouring circuits: 3 mm<br>Between the circuits and PE: 1.5 mm | EMC standards                             | EN 55011, EN 61000-6-2, EN 61000-6-4                                                 |
| Galvanic isolation             | 3-way isolator                                                             | Impulse withstand voltage                 | 4 kV                                                                                 |
| Insulation voltage             | 2 kV DC / 1 min.                                                           | Insulation voltage input or output/supply | 2 kV DC / 1 min.                                                                     |
| Pollution severity             | 2                                                                          | Rated voltage                             | between adjacent electric circuits: 300 V<br>between electric circuits and PE: 150 V |
| Surge voltage category         | III                                                                        |                                           |                                                                                      |

### Connection data

|                                  |                     |                                    |                     |
|----------------------------------|---------------------|------------------------------------|---------------------|
| Type of connection               | Screw connection    | Stripping length, rated connection | 7 mm                |
| Tightening torque, min.          | 0.4 Nm              | Tightening torque, max.            | 0.5 Nm              |
| Clamping range, rated connection | 2.5 mm <sup>2</sup> | Clamping range, min.               | 0.5 mm <sup>2</sup> |
| Clamping range, max.             | 2.5 mm <sup>2</sup> |                                    |                     |

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**Technical data**
**Classifications**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC000310    | ETIM 4.0   | EC000310    |
| ETIM 5.0   | EC000310    | ETIM 6.0   | EC000310    |
| UNSPSC     | 30-21-18-01 | eClass 5.1 | 27-23-02-07 |
| eClass 6.2 | 27-23-02-07 | eClass 7.1 | 27-23-02-07 |
| eClass 8.1 | 27-23-02-07 | eClass 9.0 | 19-17-92-90 |
| eClass 9.1 | 27-21-01-90 |            |             |

**Approvals**

Approvals



ROHS

Conform

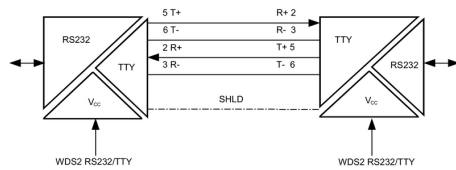
**Downloads**

|                                             |                                           |
|---------------------------------------------|-------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of Conformity</a> |
| Brochure/Catalogue                          | <a href="#">CAT 4.1 ELECTR 16/17 EN</a>   |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>              |
| User Documentation                          | <a href="#">Instruction sheet</a>         |

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## Drawings



| RS232 Assignment | SW1 |   |   |   |
|------------------|-----|---|---|---|
|                  | 1   | 2 | 3 | 4 |
| DTE              | ■   | □ | ■ | □ |
| DCE              | □   | ■ | □ | ■ |

| Operating mode   | SW2 |   |   |   |   |   |   |   |   |    |
|------------------|-----|---|---|---|---|---|---|---|---|----|
|                  | 1   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Transmit active  |     |   |   |   |   | ■ | □ | ■ | □ | ■  |
| Transmit passive |     |   |   |   |   | □ | ■ | □ | ■ | □  |
| Receive active   | ■   | □ | ■ | □ | ■ |   |   |   |   |    |
| Receive passive  | □   | ■ | □ | ■ | □ |   |   |   |   |    |

■ = on  
□ = off