The WAVE TTA is a "universal" transmitter trip amplifier. It is part of Weidmüller’s well-established WAVESERIES family of analog signal conditioners, which are widely used in process and factory automation applications.

The WAVE TTA is an intelligent signal
- isolator
- converter
- transmitter
- linearizer
- trip amplifier

The TTA will function accurately over a wide ambient temperature range, and over a wide supply voltage range, and with most types of sensor inputs. For two wire current transmitters, 24 V DC power is provided. Alternatively the TTA can be a passive input for the current source.

Most commonly used temperature sensors and DC inputs are accepted, and the TTA also allows the user to define specific characteristics, so special sensor types and linearization can easily be accommodated.

To help simplify installation and loop commissioning, test terminals are provided to permit input and output signal checks without removing cabling.

For linearized and/or isolated analog outputs, the user has a choice of standard or scalable DC current and voltage ranges. These can be set as either direct or reverse acting. The user can also select upscale or downscale output in the event of a sensor break or an open circuit in the input.

The TTA provides two independently settable changeover-relay outputs, for use as high and low level alarms or control points.

Configuring the versatile TTA to change input and output parameters is simple, and performed from a computer via an interface (CBX100 USB). The necessary TTA SET software comes free of charge with the WAVE TTA.

The WAVE TTA accepts voltage supply between 18 and 264 V AC or DC.

The TTA comes in a black WAVESERIES UL 94 V0 housing, for mounting on TS35 DIN rail. Pluggable connectors, allow screw or tension clamp wiring. A screwdriver-releasable front flap gives access to the configuration interface socket.

The WAVE TTA is CE and cULus approved.
### Technical data

<table>
<thead>
<tr>
<th>Input</th>
<th>Type, thermocouple</th>
<th>B, E, J, K, L, N, R, S, T (IEC 60584)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential / current</td>
<td>Resistance</td>
<td>-2.5 Hz…100 kHz</td>
</tr>
<tr>
<td>Frequency</td>
<td>Voltage</td>
<td>-200…500 mV (min. span 4 mV), -20…50 V DC (max. span 0.5 V)</td>
</tr>
<tr>
<td>Current</td>
<td></td>
<td>-20…50 mA (min. span 1 mA)</td>
</tr>
<tr>
<td>Current Loopal</td>
<td>Accuracy</td>
<td>&lt; 0.1 % span (DC, RTD), &lt; 0.2 % span (thermocouples)</td>
</tr>
</tbody>
</table>

### General data

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>Power consumption</th>
<th>18…264 V AC/DC, &lt; 3.5 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>Storage temperature</td>
<td>-40 °C…+70 °C, -40 °C…+85 °C</td>
</tr>
<tr>
<td>Step response time</td>
<td></td>
<td>50 ms…1 sec (RTD, mV inputs), 110 ms…1 sec (V, mA inputs)</td>
</tr>
</tbody>
</table>

### Approvals

- CE; cULus
- EN 50178 (protective separation)
- EN 55011, EN 61000-6

## Ordering data

### Accessories

- CBX100 USB Interface – 7940025031
  - Connects the WAVE TTA with a PC for calibration