263 Series LED Bargraph Indicator and Controllers

Applications
- Process Control
- Water Treatment
- Power Generation
- Control panels & Switchboards
- Monitoring Systems

Introduction
Scale can be customised to suit user’s particular needs, e.g. numbers, engineering units, logos and colors.

51 segments
Isolated D.C. auxiliary, 5 or 24V D.C. + 5% 1 Watt. Relays: Contacts rated 0.2A at 250V.
Relays are not energized when the measuring signal is within the area limited by the setpoints or during the absence of an auxiliary supply.

Performance Input:
- D.C. current: 0/1mA, 0/10mA and 4/20mA
- D.C. voltage: 0/1, 0/5, 1/5 and 0/10V D.C.

Note: Other D.C., A.C. and temperature parameters may be measured using the Crompton range of transducers in conjunction with this bargraph.

Case:
- Grey ABS

Front:
- Transparent Acrylic

Enclosure:
- IP30 for complete instrument

Code:
- IP42 for front of instrument

Temperature:
- Storage -40 to +70°C
- Operating 0 to +60°C

Humidity Range:
- Up to 80% (non condensing)

Response time: <0.5 seconds
MTBF: 88000 hours
Weight: 263-ATH 80g

Display element
- Color: Red is standard

Overload:
- x2 continuous overload

Indicated by:
- Top LED flashes 263-ATH

Accuracy:
- + 2% ±1 segment

Zero and gain stability:
- 0.02%/°C

Isolation:
- Maximum 500V A.C. between signal inputs and auxiliary supply.

Product Code
- Single bar no setpoints. D.C. (vertical) 263-ATV
- Single bar no setpoints. D.C. (horizontal) 263-ATH

Dimensions

Web: www.crompton-instruments.com • Email: crompton.info@tycoelectronics.com
The 264 series of 101 segment bargraphs offers 30 plug-in measuring modules and optional isolated analogue output, and up to four programmable setpoints for monitoring, measurement and control applications. Options include single or dual display, Smart tri-colour or mono-colour centre zero mounted bargraphs, and mono-colour right or left mounted bargraphs.

**Features**
- Two 10 Amp Form C, and two 5 Amp Form A relays available.
- Auto-sensing AC/DC power supply. For voltages between 85-265 V AC/95-370 V DC (Z) or 18-48/ 10-72 V AC / DC (Y).
- Optional NEMA-4 front cover.
- Optional isolated 16 bit analog output. User or factory scalable to 4 to 20 mA, 0 to 20 mA or 0 to 10 V across any desired span from ± one bar to the full scale range.
- 24 V DC excitation is available to power external 4/20 mA transmitters and 5 or 10 V DC excitation is available for resistance bridge type sensors.

**Software Features**
- The 101 segment bargraph can be easily user scaled
- Bargraph center zero function
- Four programmable setpoints
- Relay activation can be selected to occur above (HI) or below (LO) each setpoint

**Specifications**

<table>
<thead>
<tr>
<th>Input Specs:</th>
<th>Depends on range and function selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/D Converter:</td>
<td>14 bit single slope</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>±(0.05% of reading + 1 segment)</td>
</tr>
<tr>
<td>Temp. Coeff:</td>
<td>100 ppm/°C (Typical)</td>
</tr>
<tr>
<td>Warm up time:</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Conversion Rate:</td>
<td>10 conversions per second (Typical)</td>
</tr>
<tr>
<td>Bargraph Display:</td>
<td>101 segment 4° vertical (std), horizontal (optn), red (std), green (optn), one red one green (optn)</td>
</tr>
<tr>
<td>Polarity:</td>
<td>Selectable center zero</td>
</tr>
<tr>
<td>Positive Overrange:</td>
<td>Bargraph display flashes</td>
</tr>
<tr>
<td>Negative Overrange:</td>
<td>First segment of bargraph display flashes</td>
</tr>
<tr>
<td>Relay Output:</td>
<td>Two 5 Amp Form A relays and Two 10 Amp Form C relays</td>
</tr>
<tr>
<td>Analogue Output:</td>
<td>Isolated 16 bit user scalable mA or V</td>
</tr>
<tr>
<td>1: (volts out)</td>
<td>0-10 V DC @ 500  Ω or higher resistance</td>
</tr>
<tr>
<td>2: (mA out)</td>
<td>4.20 mA @ 0 to 500  Ω max loop resistance</td>
</tr>
<tr>
<td>Power Supply:</td>
<td>AC/DC Auto sensing wide range supply</td>
</tr>
<tr>
<td>Y</td>
<td>18-84 VAC / 10-72 VDC @ 2.5W max 4.2W</td>
</tr>
<tr>
<td>Z (std)</td>
<td>85-265 VAC / 110-370 VDC @ 2.5W max 4.2W</td>
</tr>
<tr>
<td>Operating Temp:</td>
<td>0 to 60°C</td>
</tr>
<tr>
<td>Storage Temp:</td>
<td>-20°C to 70°C</td>
</tr>
<tr>
<td>Relative Humidity:</td>
<td>95% (non condensing)</td>
</tr>
<tr>
<td>Case Dimensions:</td>
<td>Bezel 36mm wide x 144mm high DIN Depth behind bezel 135mm (5.32&quot;) Pius 16mm (0.63&quot;) for connectors</td>
</tr>
<tr>
<td>Weight:</td>
<td>9.5 oz., 12 oz when packed</td>
</tr>
</tbody>
</table>

**Product Code**

| Single bar 2 setpoints | Single bar 4 setpoints | Dual bar no setpoints | 264-ATT | 264-ATF | 264-ATS |

**Applications**
- Process Control
- Water Treatment
- Power Generation
- Control Panels & Switchboards
- Monitoring Systems

**Features**
- Programmable tri-colour or mono-colour display
- 30 plug-in measuring modules
- High resolution 101 segment LED Bargraph for easy reading
- Accuracy 0.05%
- AC/DC power supply
- 24V excitation option
- Dual vertical or horizontal bargraphs (264-ATS only)

Web: www.crompton-instruments.com • Email: crompton.info@tycoelectronics.com 2002
264 Series LED Bargraph Indicator and Controllers

Connections

Rear Panel Pinout Diagram

This meter uses plug-in type screw terminal connectors for all input and output connections.

WARNING: AC and DC input signals and power supply voltages can be hazardous. Do not connect live wires to screw terminal plugs, and do not insert, remove or handle screw terminal plugs with live wires connected.

Dimensions

Bezel

Rear View

Top View

Display

264-ATT

264-ATF Single Display

264-ATS Dual Display
264-DT Series LED Digital Indicator and Bargraph Controller

Applications
Designed to provide the user with an accurate combination of instantaneous digital reading and trend indications, the 264-DT series can be used in a variety of applications and industries such as:

- Process Control
- Water Treatment
- Power Generation
- Control Panels & Switchgear
- Monitoring System

Display/Operation
Smart Tricolour or mono-colour digital bargraph with more than 38 different plug-in measuring modules, and optional isolated analogue output and up to four fully programmable set points for monitoring, measurement, and control applications.

The digital display is 4 digit 7 segment with a character size of 8 x 4mm. The display can be programmed for either 1999 or 9999 reading at full scale. The Bargraph display is a 101 segment LED. Relay status indication is provided by LEDs situated at the side of the display.

All units have non volatile memory so in power down conditions all set parameter information is retained.

All units have a choice of inputs and auxiliary supplies available. Scales can be customised to suit users particular needs, e.g numbers, engineering units, logos and colors.

Features
- Programmable 3 colour bargraph
- 38 plug-in measuring modules
- Display colour options of Red, Yellow or Green
- High resolution 101 LED Bargraph
- Accuracy: Digital ±0.1% 1 digit
  Bargraph ±1% 1 segment
- Two or four setpoint relay versions to suit a wide range of control applications
- Easy to set up
- Time delay option on relay contact operation

38 Plug-in Modules
- AC/DC current
- AC/DC voltage
- Load cell
- Pressure
- Process
- Prototype
- Resistance
- Temperature
- 4 to 20 mA

Software Features
- Digital display and the 101 segment bargraph can be independently scaled
- Relay activation can be selected to occur above (HI) or below (Lo) each setpoint.
- Bargraph centre zero function.
- Digital display blanking.
- Front panel LED annunciators provide indication of setpoint status.
- Two 10 Amp Form C, and two 5 Amp Form A relays available
- Auto-sensing AC/DC power supply. For voltages between 85-265 V AC / 95-370 V DC (Z) or 18-48 / 10-72 V AC / DC (Y)
- 24 V DC excitation is available to power external 4/20mA transmitters and 5 or 10 V DC excitation is available for resistance bridge type sensors.
- Optional NEMA-4 front cover.
- Automatic intelligent averaging, smooths noisy signals while providing a fast display response to real level changes.
264-DT Series LED Digital Indicator and Bargraph Controller

Specifications

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<td>A/D Converter:</td>
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<td>10 conversions per second (Typical)</td>
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<tr>
<td>Digital Display:</td>
<td>4 digit 0.31” LED red (std), green (optn). Range –1999 to 9999 counts.</td>
</tr>
<tr>
<td>Bargraph Display:</td>
<td>101 segment 4” red vertical (std), green or tricolour (optn), horizontal (optn)</td>
</tr>
<tr>
<td>Polarity:</td>
<td>Assumed positive. Displays – negative</td>
</tr>
<tr>
<td>Decimal Selection:</td>
<td>Front panel button selectable, X•X•X•X•</td>
</tr>
<tr>
<td>Positive Overrange:</td>
<td>Bargraph and top segments of digital display flash.</td>
</tr>
<tr>
<td>Negative Overrange:</td>
<td>First segment of bargraph and bottom segments of digital display flashes</td>
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Product Codes

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<tr>
<th>Connections</th>
<th>Single bar no setpoints</th>
<th>264-DTV</th>
<th>Single bar 2 setpoints</th>
<th>264-DTT</th>
<th>Single bar 4 setpoints</th>
<th>264-DTF</th>
</tr>
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**Connections**

**Rear Panel Pinout Diagram**

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**WARNING:** AC and DC input signals and power supply voltages can be hazardous. Do not connect live wires to screw terminal plugs, and do not insert, remove or handle screw terminal plugs with live wires connected.

**Dimensions**

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<tr>
<th>Bezel</th>
<th>Rear View</th>
<th>Top View</th>
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<tbody>
<tr>
<td></td>
<td>139mm (5.47&quot;)</td>
<td>139mm (5.47&quot;)</td>
</tr>
<tr>
<td>35mm (1.38&quot;)</td>
<td>136mm (5.32&quot;)</td>
<td>160mm (6.3&quot;)</td>
</tr>
<tr>
<td>36mm (1.42&quot;)</td>
<td>9mm (0.35&quot;)</td>
<td>15mm (0.63&quot;)</td>
</tr>
</tbody>
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