The iT401 is the first alarm module designed to work with any 4-20mA loop-powered device and/or the iT Series sensor signal-conditioning modules, providing easily-programmable relay activation for use in condition-based monitoring or process control.

Digital technology, along with simple face-panel push-buttons and a bright digital display means never having to open the unit to alter setpoints. Memory allows user to decide to keep changes permanently, or restore manufacturer defaults.

Key features
- 35 mm DIN rail mount
- Front-panel tactile membrane switches give access to all settings
- Front-panel 7-segment LED displays
- TBUS connection to iT Series modules
- Digital processing
- Relays have over 2,000 VAC isolation
- Mounts adjacent to iT Series transmitter modules
- External alarm contacts for signal or BOV faults
- Alternate direct 4-20 mA signal input

Certifications

Note: Due to continuous process improvement, specifications are subject to change without notice.

This document is cleared for public release.
## SPECIFICATIONS

### INPUT

<table>
<thead>
<tr>
<th>Front panel push buttons:</th>
<th>Mode/reset</th>
<th>controls mode for programming or reset of latched relays</th>
<th>Increase/decrease</th>
<th>changes programming parameters</th>
<th>Reset input, terminal connection</th>
<th>contact closure for reset of latched relays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input signal:</td>
<td>TBUS connector</td>
<td>4-20 mA input</td>
<td>direct connect to vibration transmitter</td>
<td>Loop load</td>
<td>uses signal from any 4-20 mA source</td>
<td>247.5 Ω, ±5%</td>
</tr>
</tbody>
</table>

### OUTPUT

- **Alarm relay contacts, 1 form-C**: (3) alarm relays
- **Alarm relay function**: latching or non-latching
- **Relay contact load**:
  - 70° C (resistive): 8 Amp, 250 VAC/30 VDC
  - 85° C (resistive): 5 Amp, 250 VAC/30 VDC
  - Inductive: 1/3 HP, 125 VAC
- **Alarm trip (each alarm)**: high or low setpoint
- **Alarm action delay (each alarm)**: 0 to 99 seconds
- **Alarm setpoint (each alarm)**:
  - Vibration signal: 0 to 99% of full scale, in 1% increments
  - Bias voltage: 0 to 18V in 1V steps
- **Redundant 4-20 mA output**: 2 mA to 22 mA

### PHYSICAL

- **Mounting**: 35 mm DIN “T” rail
- **Width**: 22.5 mm
- **Depth, front of panel to back of DIN rail**: 127 mm
- **Height**: 100 mm
- **Front panel switches**: tactile membrane
- **Front panel digital display**: dual 7-segment yellow LED, 0.3”
- **Front panel alarm LED display**: high (red), low (yellow), BOV (orange)
- **Front panel connectors**: 4-position removable screw terminal plugs

### ENVIRONMENTAL

- **Operating temperature**: –40 to +85° C
- **Humidity, maximum**: 95% RH, non-condensing
- **Altitude, above sea level, maximum**: 3,000 meters (10,000 ft)
- **Power requirements**:
  - Voltage: 24 VDC nominal
  - Current, maximum: 150 mA

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**Notes:**
1. The three front panel alarm status LED displays are tri-color, red, yellow and orange; are illuminated when that alarm is “ On” with color indicating whether it was set as a “high” alarm, “low” alarm, or BOV alarm.
2. Power for the iT401 is supplied via TBUS connector inside DIN-mount from either IT Series transmitter (using IT031 and IT032) or external power supply (using IT032 and IT033/034/035 connectors).
3. Current draw is determined at 24 Volts DC power.
4. When used with an IT Series transmitter module.