An on-load tap changer (OLTC) adjusts the voltage ratio of an in-service transformer. It is the most highly solicited component in a transformer and the origin of 40% of transformer failures.

Developed by Hydro-Québec and marketed under licence by Zensol, the TAP-4 analyzer measures acoustic vibrations to detect most OLTC operating problems.

**In-service measurement**

The TAP-4 analyzer can detect most OLTC operating problems: contact wear, selector and diverter switch arcing, drive and timing problems, brake failures, etc. TAP-4 can also be used to determine which transformers in a fleet require a full inspection.

The analyzer uses up to three accelerometers and a current sensor. Its 100 kHz sampling frequency enables it to catch a wide range of mechanical and electrical problems.

With its specialized user-friendly software, TAP-4 records and analyzes OLTC operation. Its special calculation and graphic analysis features enable the user to compare the results from various tests with benchmarks.
Key advantages

› Quick measurements
› Easily installed accelerometers
› Robust, light and portable
› Compatible with any type of transformer having a tap changer
› Suited for high-voltage environments
› Easy detection of OLTC mechanical problems

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three inputs for IEPE accelerometers (measurement scale: ±5 V)</td>
<td></td>
</tr>
<tr>
<td>One input for a current sensor (±100 A)</td>
<td></td>
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<tr>
<td>Sampling frequency:</td>
<td>100 kHz</td>
</tr>
<tr>
<td>Recording time:</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Data acquisition: A/D converter with 16-bit resolution</td>
<td></td>
</tr>
</tbody>
</table>

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