Yokogawa sets a new standard for Distributed Temperature Sensing (DTS) in Performance, Price, and Intelligence that reduce operating cost and increase production. The DTSX200 modular design allows interchangeable configurations up to 16 channels, Yokogawa STARDOM Field Controller option, and multiple power supplies. Yokogawa is the only supplier that can provide an integrated automation solution with DTSX200, DCS, SCADA, Field Instruments and outdoor housing.

The DTSX200 is designed for Oil/Gas conventional and unconventional in-well applications, LNG and Refinery facilities, Pipeline and Tank leak detection, and other thermal monitoring applications. The DTSX200 can be used in all regions world-wide with an Operating Temperature of -40 degree C to +65 degree C. You can expect to get the same high performance and reliability found in Yokogawa products.

**Features**

- Easy to integrate in process control system
- Wide Temperature range operation
- Compact and low power consumption
  - Measure up to 6km
  - 2, 4, and 16 channels (modular optical switch)
  - Ethernet and Serial Modbus Communication
  - LAS 2.0 and WITSML 1.3.1.1 Data Format
  - STARDOM Field Controller (NFCP050) option
  - Outdoor housing with Solar Panels, Batteries, and Wireless Communication is applicable.

= LAS is Log ASCII Standard.
= WITSML is Well site Information Transfer Standard Markup Language.
## Specifications

### DTSX200 Distributed Temperature Sensor

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distance</strong></td>
<td>Measurement distance range: 1 to 6 km</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>Measurement temp. range: -200 to 800 °C</td>
</tr>
<tr>
<td><strong>Optical conditions</strong></td>
<td>Optical connector and fiber: E2000/APC</td>
</tr>
<tr>
<td><strong>Communication Interface</strong></td>
<td>Modbus: Serial, Modbus/TCP</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>NFPW426, NFPW441, NFPW442, NFPW444</td>
</tr>
</tbody>
</table>

### General specifications
- Operating temperature: -40 to 65°C (-40 to 149°F)
- Supply voltage: selectable by Power Supply
- Power consumption: 10 W (All temperature range), 2 W (Power save mode)
- Laser Safety: IEC 60825-1 Class 1M, FDA 21CFR Part 1040.10

### Optical Switch module (option)
- Channels: 2ch DTOS2, 4ch DTOS4, 16ch DTOS16
- Operating temperature: DTOS2 and DTOS4 -40 to 65°C (-40 to 149°F), DTOS16 0 to 50°C (32 to 122°F)

### Distance Specifications
- Sampling resolution: 10 cm to 1 m
- Spatial resolution: 1 m
- Spatial resolution: 1 m
- Temperature resolution: 0.07 to 0.15 °C
- Time resolution: 10 min.

### Temperature Specifications
- Measurement temp. range: -200 to 800 °C (depending on optical fiber characteristics)

### Optical Switch module Specifications
- Channels: 2ch DTOS2, 4ch DTOS4, 16ch DTOS16

### Data Conversion Software Specifications
- WITSML 1.3.1.1

### Ordering Information
- DTSX200 Distributed Temperature Sensor:
  - DTSX200-N0EN E2000/APC
- Optical Switch module:
  - DTOS2-N0EN 2ch, E2000/APC
  - DTOS4-N0EN 4ch, E2000/APC
  - DTOS16-N0EN 16ch, E2000/APC
- Power Supply:
  - NFPW426, NFPW441, NFPW442, NFPW444

### Selection Guide

<table>
<thead>
<tr>
<th>Module</th>
<th>2ch</th>
<th>4ch</th>
<th>16ch</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTOS2-N0EN</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTOS4-N0EN</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>DTOS16-N0EN</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Power Supply</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

### Application Software

The DTSX200 Control Visualization Software (DTAP200) is used to control the DTSX200 and visualize DTS data on a PC.

The DTAP200 is used to configure and control the DTSX200, as well as display measurement data graphs and generate LAS format. DTAP200 option allows a user to perform control, monitoring and analysis from anywhere on Ethernet network.

The Data Conversion Software option (DTAP200D) allows the DTSX200 to generate data files in WITSML format. When the DTSX200 is configured for WITSML conversion using DTAP200D, then the DTSX200 will generate data files in WITSML format.

### Ordering Information
- DTSX200 Control Visualization Software:
  - DTAP200-N0E Standard type, one license for one PC
- Data Conversion Software:
  - DTAP200D-N1E WITSML 1.3.1.1, one license for one DTS

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