# **Distributed Temperature Sensing**

Designed for the Most Demanding Applications



#### DTS N45-Series

AP Sensing's next-generation DTS provides a new level of temperature sensing and asset monitoring. Discover how customer requirements led to developinng a completely new and improved DTS, which breaks the limits of time, space and accuracy.

## **Unrivaled Design**

Our unique and patented code correlation concept results in an SNR 10 times better than traditional DTS instruments, offering unmatched performance in measurement range and accuracy.





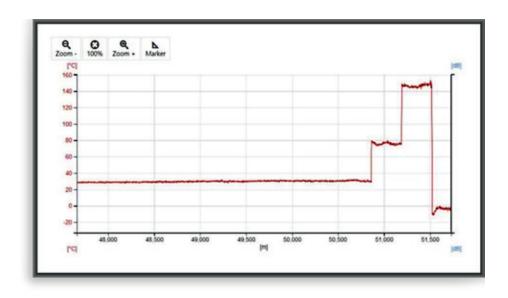
#### **Best Performance**

The overall improved new
Raman DTS offers the longest
measurement range, 70 km, and the
best performance at shorter lengths,
with a spatial resolution of 0.5 m and
fast measurement time down to
1 second.

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#### **Absolute Precision**

AP Sensing believes that RAMAN is the only technology that provides absolute measurement accuracy because it doesn't suffer from cross-talk of other physical parameters, such as strain.





### Trust Your Instrument

Traditional DTS architectures use two, AP Sensing only one avalanche photodiode (APD) — single receiver concept. The new series is designed to measure unerringly offering data you can trust, even after years of operation or under severe conditions.

## Engineered for a Long Life

**40+ years of measurement expertise from HP** resulted in benchmarking levels of **quality, ruggedness, and usability.** With the **industry's lowest failure rate** and the **most complete set of type tests and certifications**, AP Sensing is the well-known leader in quality and durability.



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## **Maximum Usability**

**Easy handling** was a key objective which is achieved by an **intuitive web interface** that guides you through the configuration. This **saves valuable time** when servicing the system. The new colorful display is informative and provides all important status information.

## Safety is Key

With a NASA-proven realtime operating system and a sophisticated communication design, the new series can be deployed in areas where data security is crucial. It is virtually impossible to exploit the new DTS as a gateway for cyber attacks.



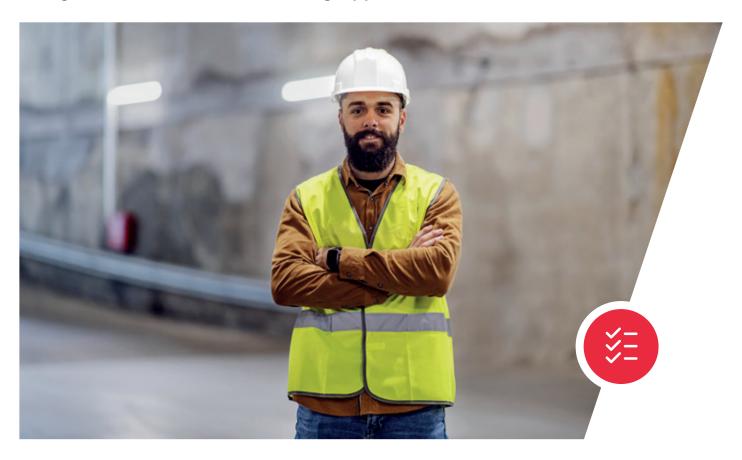
## A Step Ahead

Stay flexible whether installed in a rack system, mounted outdoors, or integrated into a larger system, we provide the right enclosure. Our innovative VTT-Technology enables configuration flexibility to attain the best measurement output for your projects... with no trade-offs.

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## Solution & Benefits

- Improved code correlation concept the longest range of up to 70 km.
- Lowest optical output power ensures a long product lifetime and allows deployment in hazardous areas (EX zones).
- Stabilized laser, single receiver design and RAMAN technology ensure the highest measurement accuracy with no cross-talk.
- Long-term measurement stability no drift: traditional DTS architectures use two, AP Sensing only one avalanche photodiode (APD).
- Cyber Security: VxWorks the real-time operating system used in mission-critical applications, e.g. the aerospace industry.

- Modern, easy-to-use web interface to set up and configure the system. It is intuitive and adapts to your language preferences.
- **High-definition display** provides vital information during set up and operation.
- Industry's most complete set of certifications and type tests guaranteeing highest product quality.
- Designed to operate everywhere from deserts to the Arctic. Available for indoor and outdoor installations.
- A lifetime MTBF. All instruments are "designed & made in Germany."



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