Distributed Temperature Sensing, newly defined
Designed for the most demanding applications

The new DTS N45-Series
AP Sensing’s next-generation DTS provides a new level of temperature sensing and asset monitoring, and 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 with 70km the longest measurement range. And best performance at shorter length with a spatial resolution of 0.5m and fast measurement time down to 1 second.
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 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
35+ years of measurement expertise from HP and Agilent Technologies resulted in benchmarking levels of quality, ruggedness and usability. With the industry’s lowest failure rate and the most complete set of type test and certifications, AP Sensing is the well-known leader in quality and durability.
Safety is Key
With a NASA-proven Real Time 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.

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.

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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- **Improved Code-Correlation-Concept** - longest range of up to 70km.
- **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 **highest measurement accuracy - no cross talk**.
- **Long term measurement stability – no drift**: traditional DTS architectures use two, AP Sensing only one avalanche photo diode (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 speaks your language.
- **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 the desert to the arctic. Available for indoor and outdoor installations.
- **A lifetime MTBF**: All instruments are “designed & made in Germany.”

Get More Information
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