



# AP Sensing Selected to Protect India's Longest Rail Tunnel

## Himalayan Mountains, India

The Pir Panjal railway tunnel is India's longest (and Asia's third-longest), at 11.2 km. It stretches through the rugged and remote Himalayan mountain range in northern India.

When your tunnel infrastructure is over 11 km long and is located in a remote mountain range high in the Himalayas, you need a Distributed Temperature Sensing (DTS) solution that you can depend on.

The Pir Panjal tunnel operators selected AP Sensing's Linear Heat Series to monitor the entire length of the tunnel, 24/7.



Ten fiber optic Linear Heat Series devices have been installed in the tunnel since 2011, using a 100% redundant installation to further increase reliability. All of the devices are linked via SCPI protocol to the operators' dual SCADA system.

The installation makes use of video camera zoning, which is coordinated with the temperature output that is measured every 62 meters. Should the temperature rise above pre-defined levels in any of the tunnel's zones, operators see an alarm and can check conditions with the cameras via the SCADA system.



Since the installation was begun in 2011, the AP Sensing Linear Heat Series has performed faultlessly and exactly as planned – bringing peace of mind for the operators, knowing that their valuable infrastructure is well protected.

