ESVE

EMBEDDED SAFETY FOR HIGH-SPEED TESTING

In 2015 a serious TGV accident occurred near Eckwersheim, in the Grand Est region. This led to the creation of the ESVE system, designed to autonomously monitor the train's speed in relation to its position on the track during testing. In the event of overspeed, it automatically triggers the emergency braking system to ensure safety.

Using SPHEREA's fast prototyping solution, in under six months, SNCF and SPHEREA developed a reliable solution to help prevent such incidents from happening again. This legacy product was recently re-designed to treat some core component obsolescence and re-use the latest SPHEREA platform.

Applications:
Embedded backup speed monitoring system and high speed trains overspeed test.

FEATURES

>Precise localisation through GPS technology
>Wi-Fi
>USB
>ATESS train system communications
>U-TEST® real time engine
>Selftest
>Data recording
>Railway I/Os
>Embedded maintenance software

BENEFITS

>Ethernet for remote access and communication
>Communication with actuators and sensors
>Analog and discrete inputs
>Dry contact outputs
>GPRS/UMTS/LTE (optional) or WiFi transmitter (optional)
>RS232/422/485 communication buses (optional)
>Temperature and humidity sensor (optional)
>Cybersecurity features (optional)
>GNSS (optional)
>IMU (optional)

TECHNICAL SPECIFICATIONS

POWER CONSUMPTION	30W
TEMPERATURE RANGE	-25°C / +70°C
ALTITUDE	Max Altitude 1400 m
HUMIDITY	0 - 90%
NOMINAL SUPPLY VOLTAGE	Between 24VDC and 138VDC

test.sales@spherea.com

spherea.com

SPHEREA