

## Key Features

- Verification and evaluation of standard and reduced Eurobalise of different manufacturers
- Verification and evaluation of switchable and non-switchable Eurobalise
- Verification and evaluation of the air-gap
- Train simulation capabilities with dynamic air-gap tests
- Verification and evaluation of C1 and C6 interfaces
- Verification of the cable connections to LEU
- Search of the break point along cables
- WiFi communication between modules for operator safety purposes
- Compact and portable
- Resistant to shock
- Resistant to water
- Operating temperature -10° to +50°
- Storage Temperature: -20 to +70 °C
- On board rechargeable battery
- Typical time period for test verification and acquisition: 3 minutes
- Housed in Lightweight Strong HPX® Resin suite case
- Dimensions: 524 x 428 x 206 mm

Compact. Independent. Certified.



Flexible. Portable. Certified.



eWings  
Wireless  
and RF  
Railway  
Solutions

Bright ideas make life easier

# Diagnostic Tool PI SCMT

Born to verify all the Eurobalises directly along **Railways lines**



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It finds **underperforming parameters** and **anomalies of Eurobalise**

It makes operator **manufacturer independent**

It is **certified** by a third party validator

The PI SCMT equipment is a flexible and portable tool intended for performance verification and evaluation of Balises of different manufacturers compliant to Eurobalise standard. It is able to verify on field performances of fixed and controlled Balises together with their connections to LEU. The PI SCMT tool works in full compliance with ERTMS/ETC standardisation and CE marked.



The equipment PI SCMT comprises three main modules:

- BAL
- IFC
- Console

The modules are wireless connected by means of WiFi 802.11.b. Each module is independent and biased with its own rechargeable battery. All the modules are housed in a lightweight strong resin IP65 suite case.

## Console

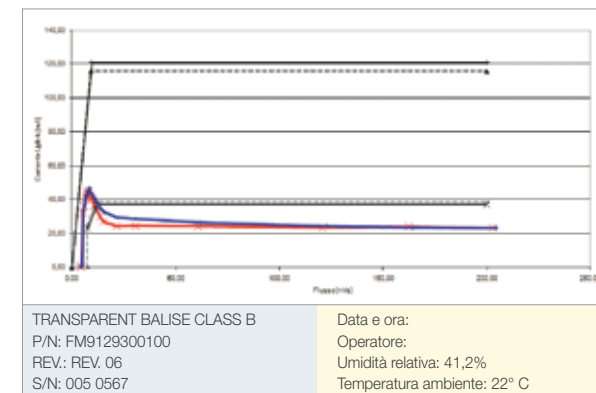
The console is a powerful toughbook with wireless control of the system and sunlight-viewable display.

The simple interface of the console provides further information about the status of the modules and in particular about the battery levels and the WiFi Connection.



Using the console commands PI SCMT Tool verifies the quality of air-gap connection and of C1, C6 interfaces. Moreover it is capable to find open and shorts along the cable connections.

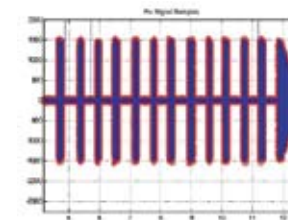
- It permits the operator to evaluate the behaviour of the Eurobalise finding anomalies and degrades for their prompt replacements
- It makes the operator positioning in a safety place quite far from railroad tracks
- It simulates a train transition thus testing performances in dynamic operating conditions



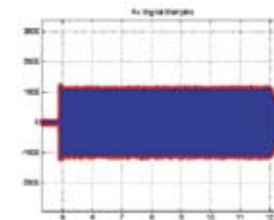
Verification of the Balise AirGap (interface A)

The Air-gap test verifies the I/O characteristic at different magnetic flux levels simulating dynamic conditions (train approaching and passing).

Test report is automatically written at the end of tests  
Test graphic result appears by a simple click on console buttons.



Plot of Analog response  
Malfunctioning behaviour at high flux



Plot of Analog response  
Correct behaviour at minimum flux