



Solutions GmbH

Devices & systems for monitoring DC power systems and cable infrastructure as well as
Special machines for quality assurance of physical and electrical quantities.

Klaus Gradischek
CEO

WITT Solutions GmbH

- Establishment in 1972
- 07.2017 Takeover by Gradischek
- Development and manufacture in Germany Wustermarkt by Berlin

Member

DIE BAHNINDUSTRIE.
VDB VERBAND DER BAHNINDUSTRIE IN DEUTSCHLAND E.V.

SENSOR Group
Berlin-Brandenburg



WITT Solutions GmbH

Your engineering partner since 1972

Standard products for DC-powered railroads, battery, solar systems from 12 VDC to medium voltage systems of 52 kV.

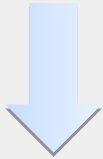
Development and marketing of measurement- and test-techniques for a plane or rough environment.

Measuring electronics and sensors to analyse vibrations.

Measurement- and test-techniques for single and small batch production.

Service and product overview

Special machines



Special machines for
quality assurance and test
systems of physical and
electrical quantities

International
Product lines



Monitoring earth potentials
Short-circuit systems
Monitoring AC/DC Voltage
Monitoring cable systems
Measuring transformer
Fuse monitoring



Measurement data
management
e.g. stray current

WITT Bridge (WB)



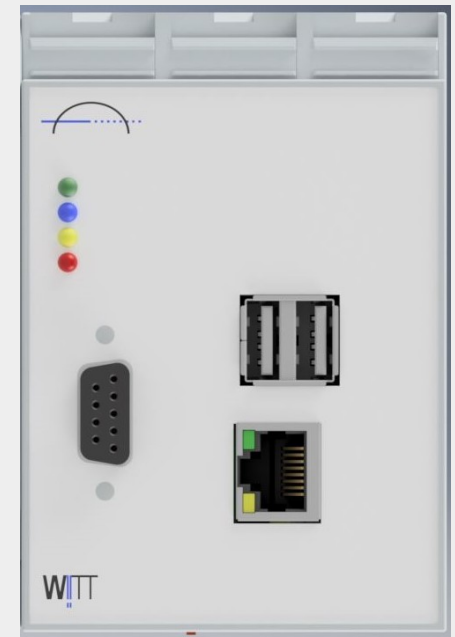
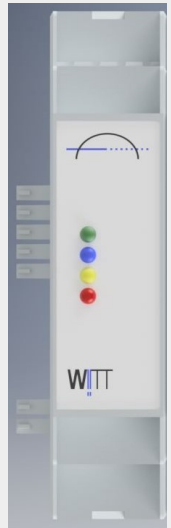
Modular measurement platform
for demanding tasks



Our knowledge, Modular, Standardized and flexible

WITT-Bridge Autonomous Intelligence

- Measuring and control component
 - Have their own intelligence, can be flexibly expanded
 - Specific functions (e.g.: contactor, thyristor)
 - are organized autonomously
 - Galvanic isolation up to 3 kV on the control side
- Central unit (WB-HS)
 - Communication e.g. external systems like SCADA
 - User interface for configuration of the measuring and control system
 - Mass data storage
- Low energy design
- Safety and security tasks can be mapped.



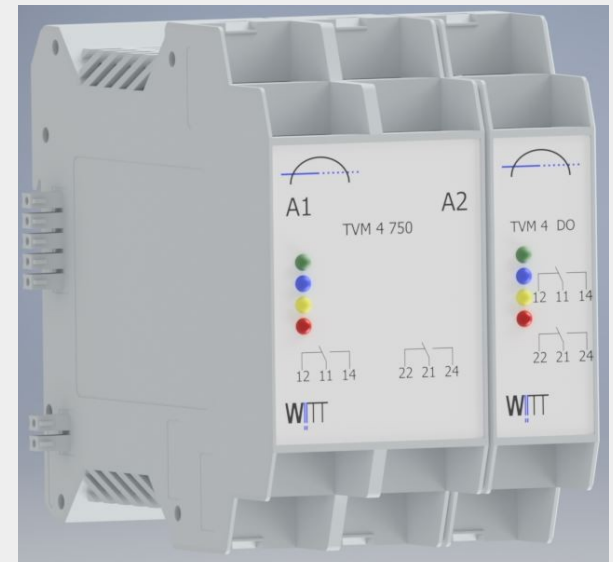
Monitoring of Cable Infrastructure

- 3 Product lines
- Current-carrying and non-current-carrying (e.g. return conductor) cables
- Insulation monitoring
- Detection of a theft und Position

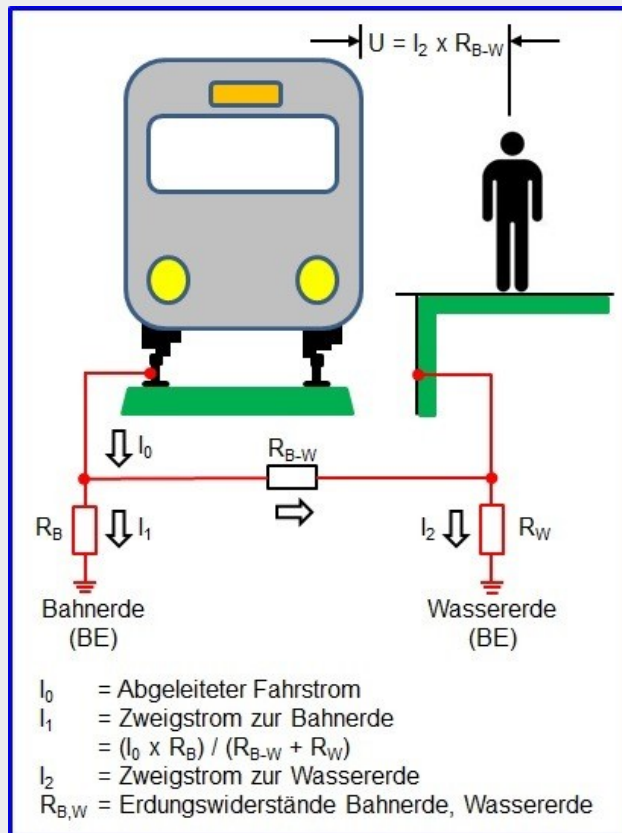


DC voltage / Traction voltage monitoring

- Driving voltage: 660 to 3.000 VDC
- 2 changer per module
- No external supply necessary
- Thresholds:
 - Rising or falling edge evaluation
 - Answering delay
 - Counting threshold exceedance
- without auxiliary voltage. Autonomous measurement evaluation from 24VDC



Earth short-circuiters (VLD)



- DIN EN 50122-01, 50122-03
- Buildings and protection from electric shock
- Direct, alternating and undulatory current

Earth short-circuiters (VLD)

PÜWE

(EscS 3)

EKS100

(EscS 5)

EKS8

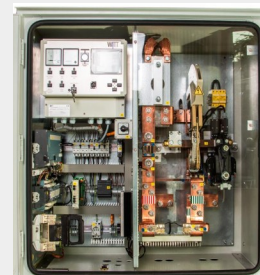
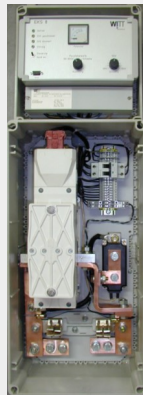
(EscS 2)

EKS 1000

(EscS 7)

SBE

(EscS 701)



Vattenfall

EBA

EBA

EBA

Federal Railway Authority (EBA)

Patent 10 2016 215 769

Reducing a potential difference between earth connections /
earthing systems of a railway network earth short circuiting device ESC

References

A Selection



Rhein-Neckar-Verkehr



Hannover



St. Petersburg



(Austria)



Thank you very much

for more information and further details

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