

# datalogger.01

## RIU-ETCS 800

**RIU-ETCS – Funkwerk’s mobile solution for ETCS applications** – provides two fully independent radio units with state-of-the-art GSM-R mobile terminations MT or MT<sup>2</sup> (8 watt) in combination with dedicated wide-range power supply modules SV2 continuously covering the range of 24 to 110 V onboard battery voltage.

**The data logger** is designed for raw data collection of the trace data from the fixed MT2 radio modules inside the RIU-ETCS 800. Additionally data input from GPS and balise information can be recorded optionally. The data will be stored in an internal memory and cyclically overwritten. The stored data can be read out via Ethernet connection. For each MT2 one data logger device has to be installed in the RIU-ETCS 800.



### Technical Data

	RIU-ETCS	datalogger.01
according to IEC 60297-3 Dimensionen (W x H x D)	3 U / 53 HP 325 x 132.6 x 242 mm	3 U / 4 HP 25.06 x 128.4 x 169,93 ± 0,4 mm
Weight	ca. 6 kg	ca. 0.55 kg
Nominal Input Voltage	24 to 110 VDC	internal

### Environmental Conditions

Operating temperature	-20 °C to +70 °C	-20 °C to +70 °C
Relative humidity	acc. to EN 50155	acc. to EN 50155

### Interfaces

<ul style="list-style-type: none"> <li>▪ 2 data interfaces</li> <li>▪ 2 voltage interfaces</li> <li>▪ 2 antenna connections</li> <li>▪ 2 service interfaces</li> <li>▪ 2 PE terminals</li> </ul>	<ul style="list-style-type: none"> <li>▪ GPS NMEA-0183 data (RS422)</li> <li>▪ 5-pole M9 connector MT2 trace data (RS232)</li> <li>▪ tbd. Balise information (RS422)</li> <li>▪ Ethernet connector</li> <li>▪ power supply</li> </ul>
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On an initiative of the EC, European Railways have introduced ETCS (European Train Control System) as the unified control system for train command and control for high speed traffic. This standard shall insure European interoperability with high reliable and safe operation, economic operation and increased speed and track capacity besides many other operational and technical benefits.

ETCS Level 1 is an overlay of the existing signalling systems with Eurobalises and track circuits. Levels 2 and 3 are supported via the GSM-R data communication in the transfer of movement authorities and a comprehensive information interchange.

The trainborne equipment for these two levels requires two radio subsystems for GSM-R data calls independent to the GSM-R voice communication system.