

KiRoad Wireless P1 Wheel Unit

Type 9811B1

for RoaDyn P1xy

The telemetry module Type 9811B1 is designed for use with the KiRoad Wireless P1 Onboard Unit Type 9813B... (digital far-field telemetry for RoaDyn P1xy wheel torque transducers). The system is used for wireless digital transmission of measurement signals and system control information between the wheel force transducer and the on-board unit inside the vehicle.

- Wireless digital data transmission
- Operation of up to 4 separate transmission modules per on-board unit
- Rechargeable battery with >8 h capacity, even at very low temperatures (e.g. during winter tests)
- Battery-charger connection on the front side of the module for direct charging on the car; no dismounting required



Optional: power bank

Description

The KiRoad Wireless P1 Wheel Unit digitizes all measurement data from the RoaDyn P1xy wheel torque transducers and transmits the signals to the on-board unit Type 9813B... inside the vehicle. The Wheel Unit can be easily mounted onto the wheel torque transducer using a four-screw attachment. The system is equipped with a built-in rechargeable battery for a long operating time of more than 8 hours, even at low tempertures. A battery charger for connecting to the front side of the module is included within the scope of delivery; this means that the battery can be recharged directly on the parked vehicle without dismounting it. The sending module transmits the signals on the 2.4 GHz wireless band to the on-board electronics, which can control and synchronize up to 4 sending modules. Because each KiRoad Wireless P1 system sets up its own encrypted WLAN network, several KiRoad Wireless systems can work together simultaneously without problems; for example, several vehicles, each equipped with 4 RoaDyn P1xy.

Technical data

| Dimensions (LxBxH), approx. | mm | 112x112x89 |
|--|-----|--|
| Weight | g | 700 |
| Operating temperature range | °C | -30 50 |
| Power supply | | lithium-Ion |
| | | accumulator |
| Number of load cyles | | >500 |
| Wireless standard | | IEE 802.11n |
| Transmitted channels | | |
| Torque | | My |
| Temperature | | T _C , T ₁ T ₄ |
| Battery voltage | | V _{bat} |
| Resolution My, T _C , T ₁ T ₄ , V _{bat} | bit | 16 |
| Sampling rate | | |
| M_{y} | Hz | 1 000 |
| T _C , T ₁ T ₄ , V _{bat} | Hz | 25 |
| Battery operating time | h | ≥8 |
| | h | 2 |

Included accessories Ordering no. Battery charger for telemetry module Power connector 5013803 Dummy plug 6500836

Optional accessories Ordering no. • Powerbank P1 Wheel Unit 551877068

Ordering code

• KiRoad Wireless P1 Wheel Unit Type 9811B1