pironex
electronic and software solutions

Data sheet piBike-HMI

# piBike-HMI

## Important characteristics

- Innovative fleet management and access solution for bicycles and bike sharing systems
- Smart bike-on-board computer with Radio, RFID reader, E-Paper display and CAN/LIN interface
- GPS module allows the location of the vehicles
- Ideal solution for:
  - Companies
  - Public transport, cities and Communities

## Overview

The HMI with the e-paper is an innovation. Directly at the wheel occurs on the graphical display the dialog with the user. Interesting informations are displayed on the display, if the vehicle is in the waiting mode. Also in the night and even with direct sunlight always perfect readable. Without energy consumption.

The on-board computer has an RFID-Lesegerät, GPS-Ortungssystem, GPRS data transmission to the operator portal, data interfaces to the bike bus and Radio. Fulfilled requirements,
in order to integrate available bicycles on the maret easily and cost-effectively into rental systems.

## Technical specifications

| Basics | |
|---|---|
| Supply voltage | via dynamo<br>or 6 - 60 V DC |
| Battery | Internal rechargeable battery |
| Sensors / Other | Motion sensor with compass, brightness sensor, Real-time clock, temperature monitoring, direct control of the piBike lock |
| Connection sockets | 1 x supply voltage / bicycle interface<br>1 x supply management for piBike-Lock |

| Interfaces | |
|---|---|
| User interfaces | illuminated E-Paper display, RFID reader (13,56 MHz),<br>4 buttons, LEDs (4 x keyfeedback, 2 Indicators), Buzzer, |
| Radio interfaces | GPS tracking system (GPS + Glonass), GPRS broadcasting,<br>Low Power RF transmission modul (868MHz) |
| Bicycle interfaces | supports CAN / CANopen - EnergyBus, LIN |
| EnergyBus | EnergyBus 2.0, CANopen / EnergyBus standard CiA 454 |