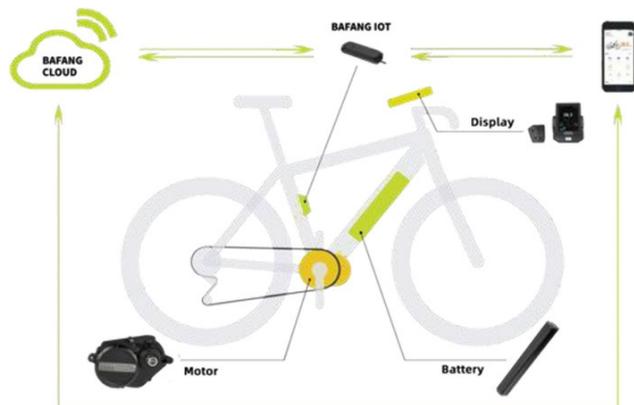IOT SYSTEM

## *Controlling, customizing, and configuring e-bikes*

**Bafang (China) is producer of components in the e-bike sector including digital communication and networking products. The IOT system has been added to the portfolio. The CAN-supported system, cosists of a module, the company's Go+ app, and cloud.**



*How the IoT (Internet of Things) system works (Source: Bafang)*

According to the company, the system helps the digital-savvy biker to control, customize, and configure their e-bike, allowing riders to focus on what's important – the fun factor. The product helps a cyclist to analyze their riding data, behavior, and habits and store them in a personal cloud. With the help of this data and insight, riders will have improved market orientation regarding bike-related items, services, and product innovations suitable to their style, explained the company. Likewise, manufacturers and dealers can use such "bike profiles" to meet the wishes, demands, and expectations of their customer.

The IOT product dimensions are flexible according to the manufacturer's frame specifications. When suitably aligned, a rider can personalize and continuously synchronize various parameters of their e-bike via the Bafang Go+ app/Bluetooth (nano sim card (4 GiB) but also 2/3 GiB compatible). Available information includes activity record, ride data, engine, display and battery information or status, anti-theft technology, remote control bike unlocking, current GPS position, warning of irregularities, and fault messages (failure notice). Additionally, "cycle clubbing" with other cycling enthusiasts to share routes, meeting points, and photos are possible in real time.

The digital exchange of data takes place, as already mentioned, via the Go+ app. This app (currently downloadable in Chinese and English for IOS/Android) forms a visual window for the module. With the Go+ app, the rider enters their control, adjustment, and steering data into the respective configuration window, and these are transmitted to the module via Bluetooth. The IOT module then communicates/interacts with the selected, electronically-connected device to perform the required functions (e.g. adjustment of eMotor parameters). A CAN system takes care of the data exchange between the cloud and the app.

The system is Bafang's first step into the world of communicative connectivity for consumer products; therefore, this system will be continuously assessed and updated, explained the company.



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*IOT module and Go+ app (Source: Bafang)*