



E-BIKE SYSTEMS



JD Components Co., Ltd.

23F-A1, No.236, Shizheng N. 2nd Rd., Xitun Dist.,

Taichung City 407, Taiwan (Taichung Office)

Tel: +886-4-2251 9325

Fax: +886-4-2251 9563

E-mail: info@tranzx.com

JD Europe Components GmbH

Salinenstraße 52

61231 Bad Nauheim

Germany

Tel: +49 (0) 6032 / 92671 30

Fax: +49 (0) 6032 / 92671 59

E-mail: info@tranzx.com

TranzX
inspiring your ride



CONTENTS

| | |
|-----------------------------------|-----------|
| Introduction About TranzX _____ | 02 |
| New E-bike System Overview _____ | 03 |
| Product Finder _____ | 15 |
| Driving System Category _____ | 17 |
| Motor Specification _____ | 21 |
| Battery Specification _____ | 22 |
| Display Specification _____ | 23 |
| Sensor Specification _____ | 24 |
| E-bike Diagnosis Tool-LogiX _____ | 25 |



ABOUT TRANZX

In the year of 2009, TranzX changed the face of the global E-bike industry by introducing our first E-bike, the Eagle, and revolutionized the world of urban E-mobility with Eagles's success. No longer were E-bike made conventionally, E-bikes now inspire teens, adults, men and women worldwide in various forms.

Since the debut of the first TranzX E-bike system in the year of 2007, TranzX has made tremendous progress in building a diverse drive system to supply this fast-changing market. Our passion never ceases in search of greater e-mobility solutions. To this day, inspiration and innovation, our core values, continue to guide us on this journey towards new possibilities.



NEW E-BIKE SYSTEM OVERVIEW



A system features an extremely light R17 rear hub motor with a quick-release function, making e-gravel/road bikes wheelset changing more efficiently. Up to 45N.m torque output and a smart BB06T torque sensor provides cyclers strong and smooth pedal assist in various riding scenarios.

R17 system also perfectly integrates an in-tube battery, a frame embedded HMI with remote control panel keep the bike simple yet elegant outlook.



The new compact R17 hub motor is designed for e-bike cyclers who love adventure, and concern their bike's weight and wheel changing process during the journey.



The DP33 HMI presents a compact size with 1.3" OLED screen which delivers essential data to read. Besides a single button on the body, an ergonomic remote unit RC33 helps cyclers in operation comfort and intuitive switching experience.



The lightweight (<2kg) 245Wh BL27 battery equipped with a controller that can be fully integrated in the down tube to give e-bikes a neat outlook .



The patented BB06T ISIS bilateral bottom bracket torque sensor measures both cadence and torque at each pedal, supporting seamless on/off pedal assist in every cycling.

R17 REAR HUB MOTOR



FEATURES

- Voltage: 36V
- Compact size: 119mm
- Featherweight: 1.85kg
- Powerful output: 45N.m
- Standard M12 quick-release thru axle
- Support up to 40 km/h
- Up to 12 speed cassette

R17 is a compact, featherweight rear hub motor, and thanks to the unique design, changing e-bike rear wheel will not be a pain in the neck anymore. Patented two-stage planetary reduction mechanism increases durability of gears by 20% ~ 30%.



45 N.m
TORQUE



40 Kph
MAX. SPEED



R17 Plus



R17



R17: 1.85 kg
R17 Plus: 2.03 kg
LIGHT WEIGHT



M12
BOOST THRU-AXLE



R17 Plus Thru-Axle and Connector

R17 PLUS REAR HUB MOTOR WHEEL ASSEMBLY

Connector Type

Patented magnetic mechanism is adopted.

When the magnet appeal to steel plate, fasten thru-axle so the female end is been pushed to connect male end on the motor.





R17 PLUS REAR HUB MOTOR WHEEL DISASSEMBLY



Connector Type

Patented magnetic mechanism is adopted.

- Firstly, the thru-axle is rotated, the female end is detached with thru-axle in 1st stage.
- Secondly, the connector is clamped by the limit device in the 2nd stage.
- Finally, keep rotating to separate the quick release axle from the connector. The quick release axle can be pulled out.



The state of connection.
(Female & Male end has connected)



1ST Stage

- The thru-axle is rotated, and female end is detached with thru-axle because of magnetic appealing.
- Now female end detaches about 7.5mm from connecting point in the motor.



2nd Stage

- Keep rotating and pull out thru-axle, and now the connector is clamped by limit devices on the frame so can't pull out together.
- Now thru-axle detaches from connector's female end.



3rd Stage

- After thru-axle completely detaches from connector, pull out the axle and take the motor down.

DP33/RC33 FRAME EMBEDDED HMI

FEATURES

- 1.3"OLED screen (64*128 pixels)
- Dimension: L81 x W27 x H26 mm
- Communication: CANBUS
- Motor support level: 0~4
- Information: support level / speed / ODO / battery indicator / error code / walk..etc
- Bluetooth connection available
- Optional RC33 remote control panel
- Ingress level: IP65

DP33, the embedded one button HMI reveals essential information to boost cyclers concentrating on their cycling.



BL26 IN-TUBE BATTERY



FEATURES

- 36V, 14Ah, 504Wh
- Cells type 18650
- Available for upside or downside mounting
- 2 steps of release for users safety

DIMENSION

- 374 * 85 * 93mm
- EN 15194: 2017 COMPLIANCE

BL26 in-tube battery provides 504Wh capacity, and the variant mounting styles fit different frame designs.



MOUNTING & RELEASE

UPSIDE MOUNTING



DOWNSIDE MOUNTING



TURN THE KEY TO UNLOCK



PRESS THE RELEASE BUTTON



BL27 IN-TUBE BATTERY



FEATURES

- 36V, 6.8Ah, 245Wh
- < 2.0kg (controller included)
- Cells type 18650
- BMS and controller integrated

DIMENSION

- 467 * 47 * 41.5 mm (controller included)
- CE/UN38.3/ISO13849 COMPLIANCE

The lightweight BL27 battery equipped with the controller that can be fully integrated in the down tube.



BB06T ISIS DRIVE TORQUE SENSOR



FEATURES

- Torque detect sensitivity 2 N.m
- Cadence resolution up to 10°
- ISIS drive interface
- Customizable shaft length for frame
- Press Fit or Threaded type
- Patented axial clearance adjustment rings
- N.W.: 435g

An innovative BB06T sensor has bilateral torque and cadence detection function. Thanks to patented axial clearance adjustment rings, users are able to eliminate axial clearance and avoid preloading at the same time.



PRINER PRODUCT



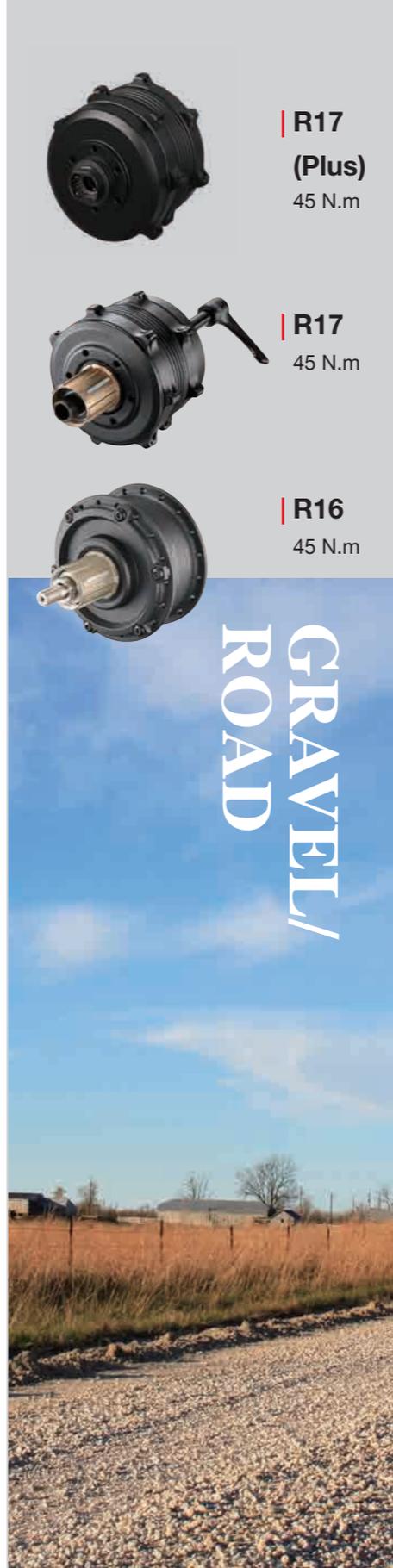
M17
85 N.m

MOUNTAIN



M17
85 N.m

TREKKING



**R17
(Plus)**
45 N.m

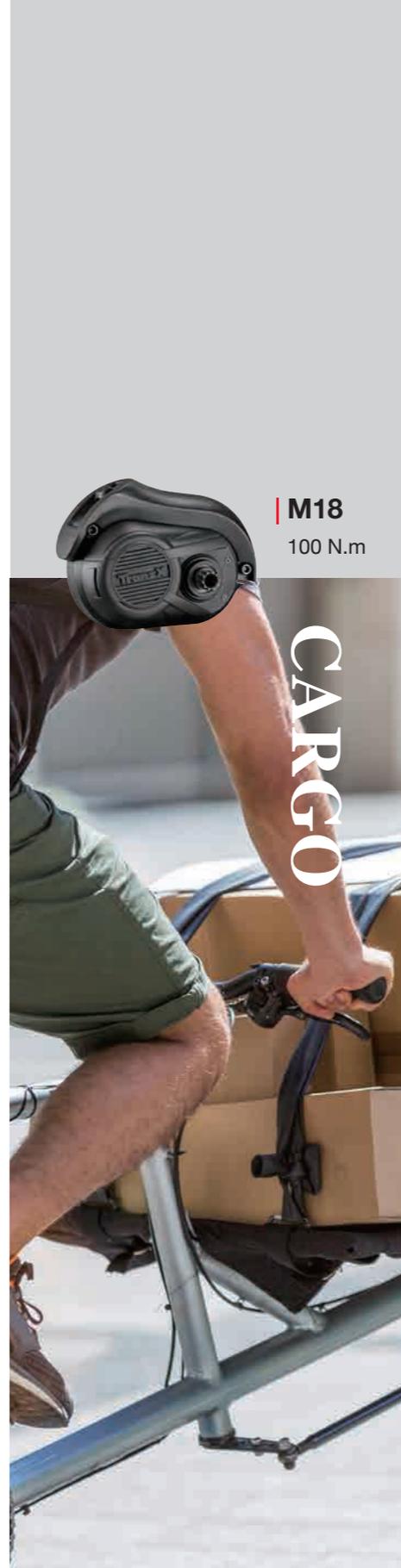


R17
45 N.m



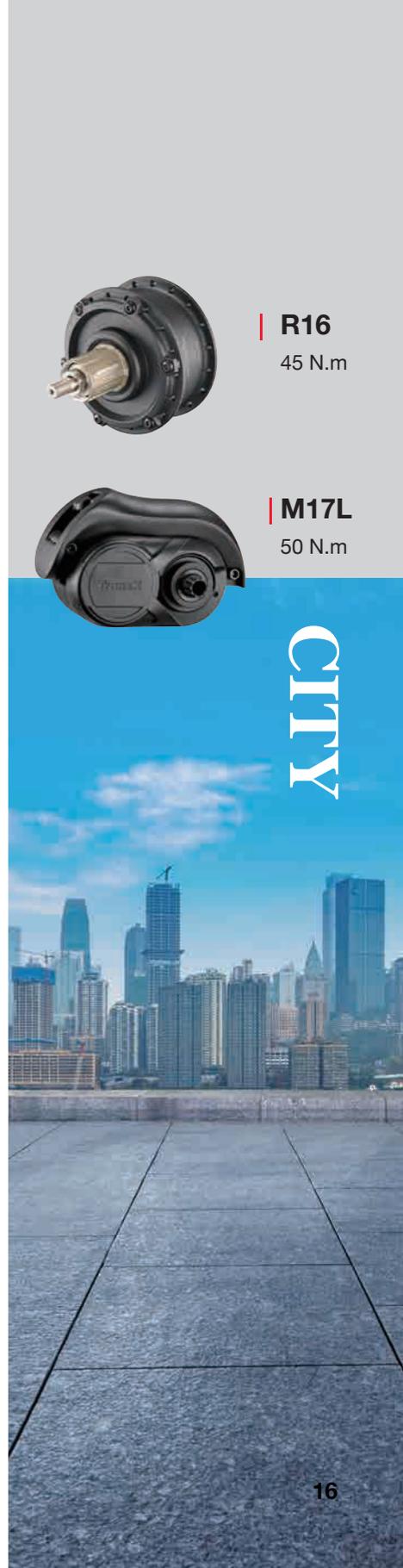
R16
45 N.m

GRAVEL/
ROAD



M18
100 N.m

CARGO



R16
45 N.m



M17L
50 N.m

CITY

CITY

An e-city drive system is designed for urban cyclers that aims to craft a leisurely and comfortable riding experience in the daily commute.



CARGO

A robust e-cargo drive system is designed as a good substitute for large, heavy e-cargo systems. Cyclers can load parcels and transport them without worrying the terrain.



| Line | Series | Display | BB Sensor | Battery | Motor |
|------|-------------|---------|-------------|---------|-------|
| City | R16 Series | DP31 | BB05C/BB05T | BL26 | R16 |
| | M17L Series | DP32 | Built-in | BL26 | M17L |

| Line | Series | Display | BB Sensor | Battery | Motor |
|-------|------------|---------|-----------|---------|-------|
| Cargo | M18 Series | DP32 | Built-in | BL26 | M18 |

ROAD & GRAVEL

An ultralight e-road drive system is meant for creating cyclers a convenient and powerful riding experience. With boost thru-axle design, each ride could become more efficient.



TREKKING/ MOUNTAIN

A durable e-mountain drive system features powerful output while crossing challenging terrain. With responsive torque sensor technology, an instant pedal assist allows cyclers focusing on the road.



| Line | Series | Display | BB Sensor | Battery | Motor |
|---------------|------------|---------|-----------|---------|--------------|
| Road & Gravel | R17 Series | DP33 | BB06T | BL27 | R17/R17 plus |
| | R16 Series | DP33 | BB05T | BL27 | R16 R16L |

| Line | Series | Display | BB Sensor | Battery | Motor |
|---------------------|------------|--------------|-----------|---------|-------|
| Trekking / Mountain | M17 Series | DP32 DP31 | Built-in | BL26 | M17 |



MOTOR SPECIFICATION



| | M17 | M17L (NEW) | M18 (NEW) | R17 (NEW) | R17 (PLUS) | R16 / R16L |
|---------------------------------|----------|------------|-----------|----------------|-----------------|-----------------------|
| Position | Central | Central | Central | Rear | Rear | Rear |
| Voltage | 36V | 36V | 36V | 36V | 36V | 36V |
| Max.Speed | 25/32kph | 25/32kph | 25/32kph | 25/32/40kph | 25/32/40 kph | 25/32kph |
| Weight | 3.20 Kg | 2.75 Kg | 3.3 Kg | 1.85 Kg | 2.03 Kg | 2.00 kg (R16L: 1.7kg) |
| Max. torque | 85 Nm | 50 Nm | 100 Nm | 45/38/30 Nm | 45/38/30 Nm | 45/38 Nm |
| Nominal output | 250W | 250W | 250W | 250W | 250W | 250W |
| Noise Level | 69 dB | 69 dB | 69 dB | 65dB | 65dB | 65dB |
| Coaster Brake Compatible | NO | NO | NO | Disc Brake | Disc Brake | Disc Brake |
| Ingress Protection | IPX5 | IPX5 | IPX5 | IPX5 | IPX5 | IPX5 |
| Diameter | | | | 119 mm | 119 mm | 119 mm |
| BB Axle | ISIS | ISIS | ISIS | x | x | x |
| Thru-Axle | | | | Thru axle 12mm | Thru axle 12mm | |
| O.L.D. | | | | 148 mm | 148 mm | 142 mm |
| Cassette Max. | | | | 12 speed | 12 speed | 11 speed |
| Connector Type | | | | 9 pins wire | plug in and out | |
| Origin | TW | TW | TW | TW | TW | TW |



BATTERY SPECIFICATION



| | BL26 | BL27 |
|-----------------|--------------|--------------------|
| Position | In-Tube Type | Fully In-Tube Type |
| Voltage | 36V | 36V |
| Capacity | 14Ah | 6.8Ah |
| Wh | 504Wh | 245Wh |
| Weight | 2.80 Kg | <2.0 Kg |
| Origin | TW | TW |





DISPLAY SPECIFICATION



DP31/RC31

DP32/RC31

DP33/RC33

| | | | |
|----------------------|---------------------------|-----------------------------------|----------------------|
| Position | Left/Left side of display | Central / Left side of display | Embedded in top tube |
| Screen Type | 2.0" color IPS | 2.8" color IPS | 1.3" OLED |
| Support Modes | 4 | 4 | 4 |
| System | CAN BUS | CAN BUS | CAN BUS |
| Walking | Yes | Yes | Yes |
| Light Sensor | No | Yes | No |
| Bluetooth | Optional | Optional | Optional |



SENSOR SPECIFICATION



BB06T TORQUE & CADENCE (Threaded / Press Fit)

BB05T/BB05L TORQUE & CADENCE

BB05C CADENCE

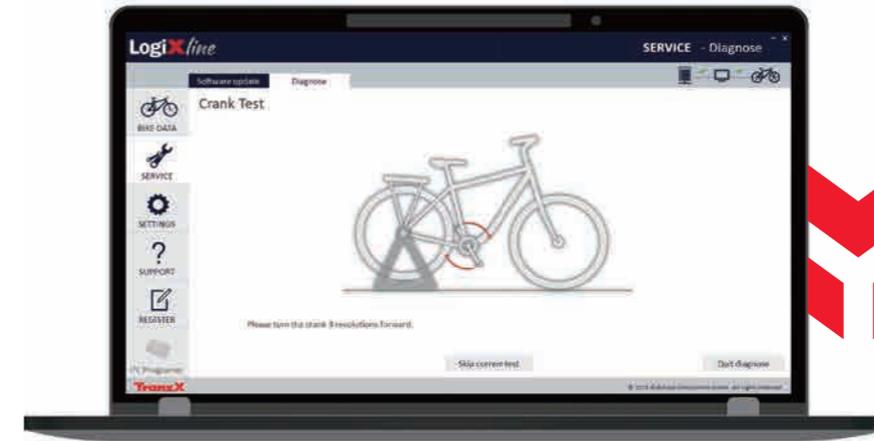
| | | | |
|-----------------------------|--------------------------------------|----------------------|----------------------|
| Input Voltage (Vcc) | 4.5~5.5 V | 4.5~5.5 V | 4.5~5.5 V |
| Torque Sensitivity | 16 mV/N.m | 16 mV/N.m | |
| Torque Range | 0.5~80 N.m | 0.5~80 N.m | |
| Cadence Signals | 36 (Pulse/Cycle) | 36 (Pulse/Cycle) | 36 (Pulse/Cycle) |
| Function | Rotational direction | Rotational direction | Rotational direction |
| IP Rating | IPX5 | IPX5 | IPX5 |
| BB Width (Threaded) | 86/92mm M47xP1.0 68/73mm M47xP1.0 | | |
| BB Width (Press Fit) | 86.5mm / ID41mm 92mm / ID41mm | 68/73 mm | 68 mm |
| Shaft Standard | ISIS | Square | Square |
| Length of Shaft | Customizable for frame standard | 146 mm/151 mm | 122 mm |
| Weight | 435g (T47) / 381g (PF86/92) | 410g/ 425g | 275g |
| Origin | TW | TW | TW |



LOGIX

- LogiX diagnostic tool
- Instant response
- Accurate readings
- Automatic detection
- All-in-one diagnostic tool

- PC based tool
- Required only USB cable to access system
- Simple user interface for automatic error detection



SMART E-BIKE DIAGNOSTIC TOOL

The LogiX Line marks the newest generation of TranzX products, raising e-mobility system to the highest threshold in diagnostics, power and performance. Superior motor performance is monitored steadily and automatically through a variety of checking mechanisms-supported by continuous system read-outs and immediate error detection. Based on leading CANbus technology, LogiX uses fewer cables, provides a higher data transmission speed than the standard I2C bus. E-bike service and assembly are easier, and parameter such as assistance ratio can simply be adjusted.