# **BXCT SERIES**LARGE DIAMETER CT SLIP RING

Large Diameter CT Slip Rings is designed for a limited height situation, which do not have any limitation in OD.

Support RS485 / 422, PROFIBUS, CAN-OPEN, CC-LINK, CANIntegrating contacting power and signal & data transmission, non-contacting data link, fiber optical rotary joints and encoder systemTypical Applications: Medical CT scanners, Luggage scanners, Oil well pipe inspection machines, Amusement rides, Cranes

In the CT system, the CT slip ring is the key component to realize the transmission of electric energy and various signals. Among them, the transmission of electric energy and control signal adopts the traditional contact transmission technology, which has the advantage of reliable contact, while the image transmission adopts the capacitor Coupling non-contact wireless transmission technology, this transmission technology has the advantages of high transmission rate, low bit error rate, and small electromagnetic interference.

orbinexus keeps up with the technological development of the times, and its CT slip ring realizes high-power electric energy transmission, bus signal transmission, and high-definition image information transmission.

Adopt unique routing and shielding methods to ensure the reliability and stability of signal, current and high-definition image transmission during the use of the slip ring

Contactless signal and data transmission rate reaches 10Gbit/s

Non-contact signal and data transmission bit error rate reaches 10 -12

### Shape structure

CT slip rings can be divided into horizontal disc CT slip rings and vertical column CT slip rings based on their external structure.

The outer diameter of the disc slip ring can be designed between 50-2500mm. The overall design tends to be thin and the thickness is generally around 10-50mm. The outer diameter of the column slip ring is generally between 300-1500mm, and it tends to have a small outer diameter for multiple loops.



# Current and Control signal transmission

The transmission current and control signal parts of the CT machine slip ring require low maintenance costs and high reliability. The electric brush needs to have strong overload capacity, low wear, long service life, low maintenance, and minimal wear and dust.



## Types and characteristics of electric brushes

#### Carbon brush holder

The contact material between the stator and the copper ring is a carbon material structure brush holder, suitable for currents above 100A, stable and reliable.

#### Brush brush holder

The contact material between the stator and the copper ring is a precious metal brush wire structure brush holder, suitable for slip rings with thinner thickness and more rings

#### Oblique brush holder

The contact material between the stator and the copper ring is a diagonal brush structure brush holder, suitable for dynamic resistance fluctuation requirements of around 0-10m  $\Omega$ 







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