

MAIN FEATURES

▶ ENVIRONMENTAL ADAPTABILITY

The intercity EMU can operate in temperatures between -25°C to 40°C, and up to 95% relative humidity when the temperature is below 25°C. It can perform at altitudes of up to 1500 meters, and bear strong winds, sand, rain, snow and fog. It can also withstand salt mist, acid rain and sand storms for short periods of time.

▶ INCREASED PASSENGER CAPACITY

An efficient interior layout provides ample standing room. Seating capacity follows the legal standard range per axle load. The maximum seating capacity is 1,998 passengers per train (based on an eight-car configuration). Trains can be coupled or configured according to capacity requirements.

The 140km/h intercity EMU has a dual power supply mode, allowing it to seamlessly connect with other urban rail transit systems like metro, vastly improving the efficiency of entire transport networks.

▶ SAFETY AND RELIABILITY

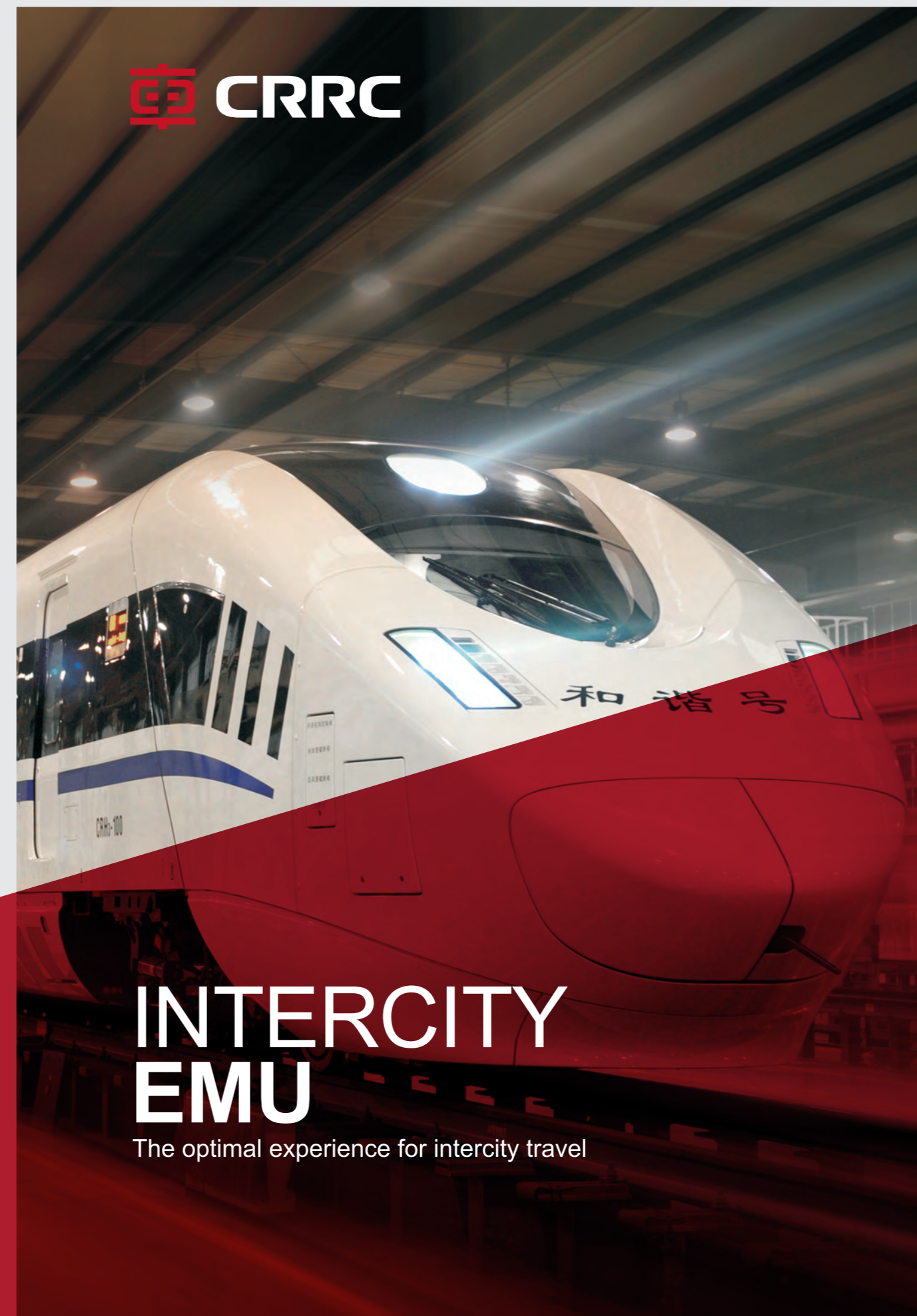
Our Intercity EMUs meet international standards including UIC, EN and DIN, and perform exceptionally well in all safety and anti-fire aspects. RAMS/LCC analysis is integral to the design and development process, which enables us to effectively reduce risk and safety hazards. Key systems and components feature a redundancy design with dual-probe sensor to guarantee operational safety and reduce false alarms.



WORKING WITH YOU TO
CONNECT THE WORLD



Address: No.16 West 4th-Ring Mid Road, Haidian District, Beijing
 Zip Code: 100036
 English-Tel: +86 10 51897295
 Deutsch-Tel: +86 10 51897284
 Русский-Tel: +86 10 51897300
 E-mail: gjjy@crrcgc.cc
 Fax: +86 10 52608280
 http://www.crrcgc.cc/



INTERCITY
EMU
The optimal experience for intercity travel

OVERVIEW

CRRC's range of intercity EMU features the most advanced intercity train technology and can be customized to suit various transportation requirements. Four products exist at present: trains of operating speeds of 140km/h and 160km/h are predominantly suitable for suburban or short-distance regional travel. These can also be connected with metro networks, making urban infrastructure more efficient. Our 200km/h intercity EMU is designed for passengers on mid-range travel, while our 250km/h intercity EMU is designed for high speed travel between major national cities. Our range of intercity EMU features optimal passenger capacity, quick start and stop technology, easy and fast access for a more efficient dis/embarkation process and enhanced passenger comfort. They are also designed to make evacuation more efficient in the case of an emergency. The trains' many energy-saving features make them an ideal choice for intercity rail travel.





▶ **ENHANCED PASSENGER COMFORT**

The interior is designed to enhance comfort, and provide a more pleasurable passenger journey. Individual interior components can be customized to meet clients' requirements, and to suit different passenger needs.

▶ **ENERGY EFFICIENCY AND SUSTAINABILITY FEATURES**

CRRC's intercity EMU is aerodynamically optimized to improve energy efficiency. Features such as the use of lightweight materials, regenerative braking and improved air conditioning, all combine to minimize energy consumption and reduce carbon emissions. The vacuum waste disposal system means there is zero discharge of wastewater and sewage.

▶ **INTELLIGENT DIAGNOSTICS**

Onboard diagnostics are carried out using a standard TCN featuring automatic control and diagnosis. Each train is fitted with over 600 sensors to allow real-time monitoring of items such as bearing temperature, motor speed, voltage, current and frequency.

All diagnostic data is transmitted wirelessly from the EMU to ground control centers, enabling the train to be monitored, and faults diagnosed remotely.

▶ **LIFECYCLE**

The intercity EMU is designed for a lifespan of 30 years. The train is highly reliable with an annual operational time of over 330 days.



MAIN PERFORMANCE PARAMETERS



140KM/H INTERCITY EMU

Configuration	2M2T
Maximum operating speed	140km/h
Maximum testing speed	160km/h
Line voltage	AC25kV, 50Hz/DC1,500V
Seating capacity	232persons
Maximum capacity	Aw2: 698persons Aw3: 926persons
Axle load	16.5t
Traction power	2576kW
Maximum starting acceleration	≥0.8m/s ²
Average acceleration	≥0.04m/s ²
Emergency braking distance on the straight road at the initial speed of 140km/h	≤680m

160KM/H INTERCITY EMU

Configuration	4M4T
Maximum operating speed	160km/h
Maximum testing speed	176km/h
Seating capacity	512persons
Maximum capacity	Aw2: 1502persons Aw3: 1998persons
Traction power	5152kW
Maximum starting acceleration	≥0.8m/s ²
Average acceleration	≥0.38m/s ²
Emergency braking distance on the straight road at the initial speed of 160km/h	≤850m



200KM/H INTERCITY EMU

Configuration	4M4T
Maximum operating speed	200km/h
Maximum testing speed	220km/h
Seating capacity (seats)	557persons
Maximum capacity	1488persons
Traction power	5520kW
Maximum starting acceleration	≥0.65m/s ²
Average acceleration	≥0.3m/s ²
Emergency braking distance on the straight road at the initial speed of 200km/h	≤1400m



250KM/H INTERCITY EMU

Configuration	Cj1 type	Cj2 type
	4M4T	4M4T
Maximum operating speed	250km/h	250km/h
Maximum testing speed	275km/h	275km/h
Seating capacity (seats)	616persons	623persons
Maximum capacity	1320persons	
Traction power	5120kW	5200kW
Average acceleration	≥0.51m/s ²	≥0.50m/s ²
Maximum starting acceleration	≥0.3m/s ²	≥0.3m/s ²
Emergency braking distance on the straight road at the initial speed of 250km/h	≤3200m	≤3200m

DRIVER EXPERIENCE

The driver cab is designed for a single driver. The layout is focused around a central console, improving both operational efficiency and driver comfort. The console is designed to facilitate maintainability and engineering analysis and has a number of features including improved anti-dazzling capabilities.



EMU MAINTENANCE

The intercity EMU is efficient and easy to maintain thanks to its modular design. Vehicle data is transmitted wirelessly to ground control centers, allowing faults to be monitored and diagnosed remotely.

The intercity EMU also benefits from a low operating cost, and can run for long periods between maintenance. 3rd level maintenance happens at 1,200,000 kilometers, 4th level at 2,400,000 kilometers, and 5th level at 4,800,000 kilometers.

CURRENT MARKET OPERATION

Eight of our intercity EMU trains are currently in operation between Guangzhou and Zhuhai in China. They are in perfect working order and have been well-received by our customers. Together, they amount to a total safe running distance of nearly 2 million kilometers.