

Chongqing, China

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Perched dramatically among steep mountains at the meeting point of the Yangtze and Jialing Rivers, **Chongqing** is one of China's most remarkable cities. Known today as the "Mountain City," its story stretches back more than 2,000 years, from the ancient Ba Kingdom to its pivotal role as China's wartime capital during the Second Sino-Japanese War. The city's modern name, **Chongqing**, meaning "Double Celebration" or "Double Blessing," was adopted in **1189** during the Southern Song Dynasty.

Chongqing's growth as a commercial, industrial, and administrative centre has depended upon reliable water supply networks for centuries. The strategic river location that made the city a major trading hub also created the need for increasingly sophisticated water infrastructure as its population expanded. Chongqing played a crucial role during the **Second Sino-Japanese War (1937-1945)** and World War II. After Japanese forces captured much of eastern China, the Nationalist Government under **Chiang Kai-shek** relocated from Nanjing to Chongqing in late 1937. The city became China's wartime capital and remained the centre of Chinese resistance against Japan.

Because of these events, Chongqing occupies an important place in modern Chinese national memory. Today, Chongqing with a population of over 35 million has evolved into one of China's largest and most dynamic municipalities, with extensive urban development spreading across its mountainous landscape. Modern bridges, tunnels, high-rise buildings, industrial facilities, and residential districts all rely upon complex water distribution systems that would have been unimaginable to the city's early inhabitants.

Of all the destinations visited in China to date, this city proved to be the most rewarding from a water meter discovery perspective. The city appears to be comprehensively fitted with water meters throughout its residential apartments, commercial districts, and historic buildings, offering an impressive variety of installations for observation, documentation, and historical interest. The HWMM spent two full days exploring the city in early October 2026.



Sighted during a walk up on a wall was a **20mm Multi-Jet Water Meter** servicing an apartment.



At the site of an early 1900's building is a modern **Chinese wireless remote reading 50mm size water meter, examining the body housing likely a Multi-Jet type.** The meter incorporates an electronic telemetry module, QR code asset identification, and radio-based communications for automated meter reading (AMR/AMI) purposes.

The most interesting marking is: IMEI: 860429062912190. An IMEI number is used by cellular communication devices. This strongly suggests the meter uses:

NB-IoT (Narrowband Internet of Things) technology. **NB-IoT is now widely deployed across China for smart utility metering and allows:**

- Automatic meter reading
- Leak monitoring
- Consumption analytics
- Remote data collection
- Reduced requirement for manual meter readers
- Certification Markings

The label includes: CMIIT ID.

Chinese Ministry of Industry and Information Technology certification. Required for wireless communication devices sold in China. The Manufacturer could not be identified.

The city transforms into a neon-lit wonderland after dark, as captured during an evening cruise.





Discovered servicing an apartment block a
重庆智慧水务有限公司
(Chongqing Smart Water Affairs
Co., Ltd.)

Model -WSD-100 a 100 mm
nominal diameter water meter.

Technical Specifications

Q3 = 160 m³/h

Permanent flow rate of 160 cubic
metres per hour.

Metrological ratio of R200 (a
measure of accuracy range).

Approved for water
temperatures up to 50°C.

Maximum allowable pressure of
16 bar. Likely a Turbine Bulk
water meter of flanged
connection type. It is also Smart
AMR retro-fit capable.

Alex & Erica from the
HWMM during their daily
walk of discovery.



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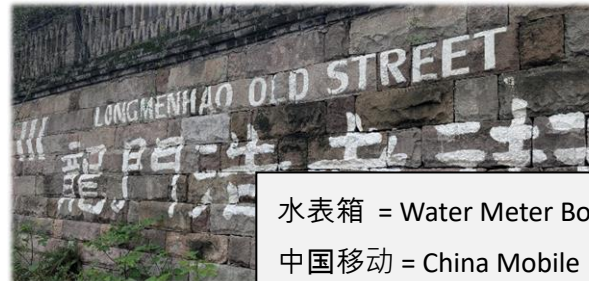




Outside the Chongqing Institute of Socialism building (est.1956) at 140 Tushan Rd, Nan'an District, Chongqing., is a Bulk **100mm Woltex-Turbine type flanged connection Water Meter** and mounted above it a **20mm By-pass Multi-Jet water meter**.

The **100m meter** is a **Chongqing Smart Water Affairs Co., Ltd.** S/N:210711567, **Model: WSD-100, Q3= 160m³/hr, R200, T50, MAP16, Woltman turbine meter.**

The **25mm Mult-Jet By-pass meter** is made by **Ningbo Water Meter Co., Ltd.** This is one of China's oldest and largest water meter manufacturers, based in Ningbo, Zhejiang Province. S/N: Z2310015408



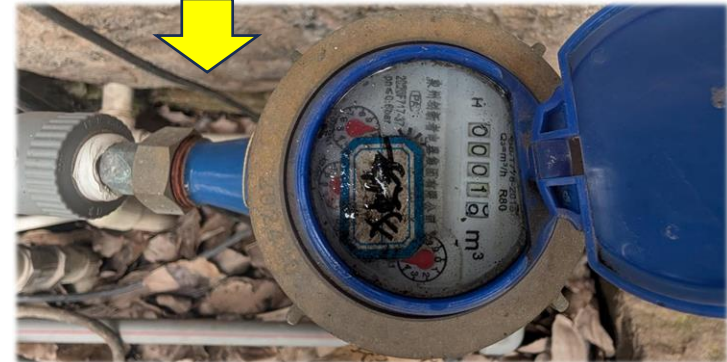
水表箱 = Water Meter Box
中国移动 = China Mobile
检修位 = Utilities Inspection Point / Maintenance Access





While exploring the historic streets of Chongqing, Alex and his companions discovered the **former residence of the Military Attaché of the United States Embassy**. The site dates from the wartime years when Chongqing served as China's temporary capital during the Second World War and hosted numerous foreign diplomatic missions. Today, the building stands as a reminder of the close military and diplomatic cooperation between China and the Allied nations during a pivotal period of twentieth-century history.

Found behind the historic building is a **15mm cold water Mult-Jet Water Meter made by Quanzhou Huaqiao Measuring Instruments Co., Ltd.** located in Quanzhou, Fujian Province, China.



What we thought were buried water meters were Smart Electronic survey control markers. Under the cover is a **cross-hatched target pattern**, which surveyors use as a reference point. In China, especially around major cities such as Chongqing, these markers are often used for:

- Geodetic survey control points** (mapping and cadastral surveys).
- Building settlement monitoring points** to detect movement of structures.
- Precise elevation benchmarks** used during construction projects.
- GPS/GNSS control networks** that provide reference coordinates for engineers and surveyors.

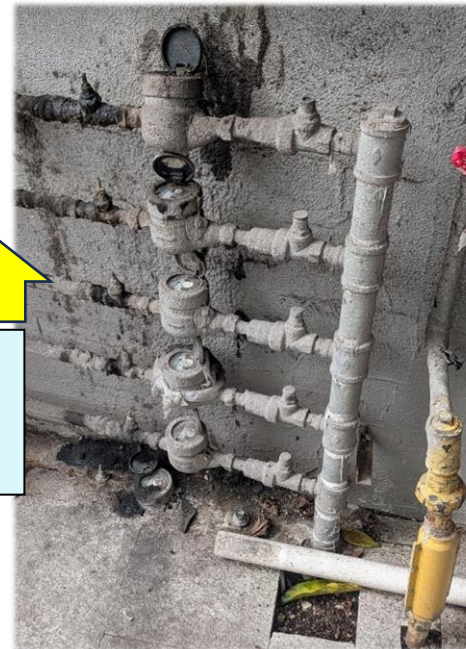




Apartment Blocks



It was discovered that many older apartment blocks had individual water meters installed for each unit, providing a true user-pays system. All the water meters identified were 15 mm multi-jet types.



Apartment Blocks



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Pictured left are Vertical multi-jet water meters, developed to suit confined meter cupboards and vertical riser systems commonly **found in apartment buildings**. Their compact installation reduced pipework requirements while maintaining the accuracy necessary for individual user-pays water billing.



The **Water Meters are identified as made by Ningbo Water Meter Co., Ltd.** This company is one of China's oldest and largest water meter manufacturers and is based in Ningbo, Zhejiang Province, China. They are all **Multi-Jet domestic water meters of Sizes: DN15 (15 mm). With $Q_{max} = 2.5 \text{ m}^3/\text{h}$, $Q_t = 100 \text{ L/h}$.**

The centre seal reads 中检所 ("China Metrology Verification Institute"), indicating it has undergone Chinese metrological certification.





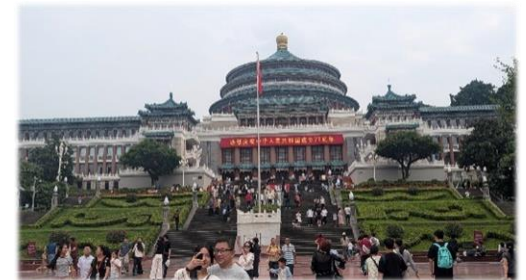
Located on Zhongshan Fourth Road in Chongqing's Yuzhong District, Guiyuan Garden was once the residence of General Zhang Zhizhong, a senior official of the National Government.

The site played an important role in modern Chinese history. During the Chongqing Negotiations of 1945, it served as Mao Zedong's workplace and reception venue while he was in the city. The garden became a significant meeting place where Mao Zedong and Zhou Enlai met with various political figures and delegates. Most notably, it was one of the locations associated with the signing of the historic Double Tenth Agreement on 10 October 1945, an attempt by representatives of the Kuomintang (KMT) and the Chinese Communist Party (CPC) to seek a peaceful path forward following the Second World War.

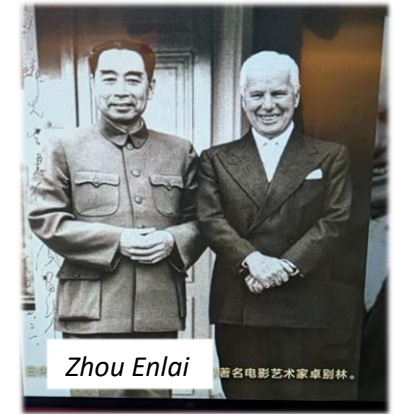


1st Photo – Chiang Kai-shek and Mao Zedong.

2nd Photo - Left to right: (first row) [Patrick J. Hurley], Mao Zedong, Zhou Enlai; (second row) Wang Ruofei. The photo is from the Chongqing Negotiations period in 1945.



Found at the site is a Chongqing Smart Water Meter Group Co., Ltd. 80mm Flanged Turbine Mechanical Water Meter. Fitted prior to the meter is some sort of valve.



Former Residence of Zhou Enlai. Located in Chongqing's Yuzhong District, No. 50 Zengjiayan served as the official residence and workplace of Zhou Enlai and the South Bureau of the Communist Party of China during the Second World War and the immediate post-war years. Beginning in 1939, the residence became an important centre for political activity, diplomacy, and liaison work during a period when Chongqing served as China's wartime capital. During the historic Chongqing Negotiations of 1945, Mao Zedong, Zhou Enlai, and other senior leaders met with Chinese and foreign visitors at the residence while discussions were underway between the Communist Party and the Nationalist Government. The building therefore became one of the key locations associated with efforts to achieve peace and political cooperation following Japan's surrender in World War II.



Scouring the site I was able to locate three **Chongqing Smart Water Meter Group Co., Ltd. Flanged Turbine Mechanical Water Meters**. Two were 100mm Sizes and one was an 80mm size. All had Pulse output capability for future AMR.

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Looking along Zengjiayan Rd



During the Chongqing Negotiations, this room was one of the places where KMT-CPC talks were held and CPC representatives met visitors. Mao Zedong met with Chiang Kai-shek, and CPC representatives met with personnel of various parties here more than once.

On October 10, 1945, "Minutes of Talks Between the Government and Representatives of the Communist Party of China" (known as the Double Tenth Agreement) was signed by the representatives of KMT and CPC.

Zhou Enlai (1898-1976) was one of the most important leaders in modern Chinese history. He was a senior leader of the Chinese Communist Party (CPC), a close associate of Mao Zedong, and served as the first Premier of the People's Republic of China from 1949 until his death in 1976.

The South Bureau of the Central Committee rallied the cultural figures, and carried out magnificent Anti-Japanese War cultural movements in KMT-governed regions persistently and unprecedentedly. The South Bureau had a great influence in KMT-governed regions.

南方局文化工作委员会委员



Residence and Operations of Dai Li

Dai Li (1897-1946) was the head of the Nationalist Government's military intelligence and secret police organization (Juntong). He is sometimes referred to as Chiang Kai-shek's "spymaster" because of his extensive intelligence network during the Second Sino-Japanese War and the Chinese Civil War.



Below: Three Gorges Museum



Prev. Page: The Cluster of Water Meters also serves the Dai-Li





Luzu Temple is located on Minsheng Road in Yuzhong District, Chongqing, one of the historic areas at the core of the city. The temple is dedicated to Lü Dongbin (吕洞宾), a celebrated figure in Chinese Taoism and one of the legendary "Eight Immortals." The temple serves as a valuable reminder of old Chongqing, preserving elements of the city's traditional street life, folk customs, and cultural heritage amid the rapid modernization of the metropolis. As surrounding districts have evolved into a modern urban centre, Luzu Temple has remained a tangible link to Chongqing's past.

The network of water meters discovered are made by **Ningbo Shanchuan Water Meter Co., Ltd.** in Zhejiang Province, China. They appear to be **100mm Turbine mechanical flanged units.**



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Chongqing Water Group Co., Ltd. (重庆水务集团), a state-controlled utility company that manages drinking water supply, wastewater treatment, and related water infrastructure across much of the municipality. It holds around 90% of the tap water market in Chongqing's central urban area and operates numerous water treatment plants & distribution networks.

This is quite significant because many of the apartment and commercial meters the HWMM observed during the visit were likely connected to the distribution network managed by Chongqing Water Group Co., Ltd.. The company supplies water sourced primarily from the Yangtze River (Chang Jiang) and Jialing River, which meet in central Chongqing before treatment and distribution throughout the city



Founded in Shanghai in the year of 1919, **the Provisional Government of the Republic of Korea** held on to a 27-year-long anti-Japanese national retrieval and independence movement. The Provisional Government of the Republic of Korea was forced to leave Shanghai after the Shanghai Hongkou Park Explosion Event took place in April 1932 and was relocated to Chongqing following the outbreak of the Anti-Japanese War. **This Building site was the residence of the Korean Government in exile from 1932 to 1945.** It has now become a bridge for Chongqing's connection which serves as a historical witness to the friendship between the Chinese and Korean peoples.



Discovered within the premises at the rear is a **Yuzhou Water Meter Co. Chongqing (渝州水表)** it is a **20mm Size Multi-Water Meter.** But I doubt the meter services the whole site.





Chongqing at night – All pictures by Alex Manu



At first glance what was assumed to be a water valve is a gas pressure regulator.

Final Reflections: HWMM Visit to Chongqing.

The Historic Water Meter Museum's visit to Chongqing proved to be one of the most rewarding and insightful stages of the Water Meter Journey. Chongqing is a city where history and modernity coexist on a scale rarely encountered elsewhere. Rising dramatically from the banks of the Yangtze and Jialing Rivers, the city has evolved from a wartime capital, devastated by 6 years of Japanese aerial bombing campaigns to a centre of national resilience into one of China's great modern megacities.

For the water meter enthusiast, Chongqing offered a fascinating glimpse into a mature and highly developed urban water supply system. Water meters were encountered throughout the city, from modern high-rise apartment towers to older residential buildings. Particularly noteworthy was the widespread use of individual 15 mm multi-jet water meters serving individual apartments, reflecting a true user-pays philosophy and a strong commitment to water accountability. The prevalence of local Chinese meter manufacturers demonstrated both the scale and sophistication of China's domestic water metering industry.

The HWMM visit confirmed Chongqing as not only one of the most important cities encountered on the journey, but also one of the most fascinating.