

China Radio Type Approval (CCC, SRRC, NAL)

People's Republic of China Radio Transmitters Type Approval can consist of three schemes:

- CCC (China Compulsory Certificate):
- SRRC (State Radio Regulatory Commission):
- NAL (Network Access Licence):



Summary of CCC certification process

CCC is a conformity marking assessment system, which serves as a **quality and safety mark**. A CCC label can be attached to products to demonstrate compliance with Chinese mandatory standards. The CCC Certificate has a **5-year validity period**. In order to get the CCC mark, there are **three possible routes** depending on product type:

- CCC Approval: CCC Approval is mandatory for the 158 types of products included in the <u>CCC approval catalogue</u>, which are divided into 22 categories. Factory Inspection is required. The Authority providing CCC Approval is <u>CNCA</u> (Certification and Accreditation Administration of the People's Republic of China).
- Self-Declaration of Conformity (SDoC): SDoC is the mandatory route for all the products included in the <u>CCC SDoC Product List</u>. CCC SDoC serves as a declaration by the manufacturer or their Chinese legal representative stating that the product complies with the proper Chinese Standard. For SDoC no factory inspection is required.



Voluntary Certification: Voluntary certification applies to products that are not covered by the CCC Approval scope. Voluntary Certification may be obtained via CCAP (China Certification Center for Automotive Products) Mark Certification. Obtaining the CCAP voluntary mark will serve as compliance proof.

CCC Certification Step-by-Step

CCC Product Marking

Once the above process has been approved by CNCA, a CCC certificate will be issued and the manufacturer will be able to mark the product including the product certificate scope defined below. Note that CCC marking needs to be renewed annually.

A code will be displayed on the right side of the CCC mark, with a specific representation:

- "S" represents "Safety"
- "EMC" represents "EMC"
- "SandE" represents "Safety and EMC"
- "F" represents "Fire Fighting"

For mark sizing, the manufacturer has two options:

- Purchase a standard-sized mark from CNCA
- Submit a drawing to CNCA for approval with the CCC mark application and print their own.

Summary of SRRC certification process

The SRRC Type Approval certification is **mandatory** in order to state compliance with Chinese standards **for radio transmission equipment**. Products shall be marked with the SRRC mandatory label to demonstrate compliance with Chinese mandatory standards. The label can be affixed either to the equipment or to the product manual. The SRRC Certificate is issued by MIIT (Ministry of Industry and Information Technology) and has a **5-year validity period**.

SRRC Product Scope:

The Radio Transmission Equipment category includes but is not limited to:



- Equipment for radio communications
- Public mobile communication devices
- Special Network Devices
- Satellite equipment
- 2.4GHz/5GHz wireless devices
- Low power devices SRD

Excluded from SRRC Scope are ISM equipment, medical devices, electrical transportation systems, high voltage electricity lines and other electrical appliances that emit electromagnetic waves.

SRRC Certification Step-by-Step

CMIIT ID

CMIIT ID is a product code, which will be issued on the SRRC Certificate and will serve as the equipment's mandatory label.

CMIIT ID format: XXXXYZNNNN. Example: 2019DJ1114

2019: Year of Approval

D: Equipment Category Code (D is for SRD Code)
J: Manufacture Location (J Represents "Import")

1114: SRRC Approval Serial Number

SRRC Module Approval

Modular approval will only be valid if it meets the following requirements:

- 1. The module shall have a data buffer/modulation unit
- 2. The RF unit of the module should be completely shielded with a shielding cover
- 3. The module shall use an integrated antenna
- 4. The module should have clear power supply requirements, and
- 5. The module complies with other relevant national laws and regulations.

The manufacturer mustindicate on the label (CMIIT ID) that the product uses a SRRC-approved radio module.

- Family approval for module-based equipment is possible for specific products (changes that do not affect RF performance of the product).
- The embedded modules (WLAN, including Bluetooth) and public mobile communication (including NB-IoT, eMTC) must already be SRRC certified.



 The State Radio Administration will intensify its supervision and inspection of relevant radio transmitting equipment.

Summary of NAL/CTA Certification procedure

NAL/CTA (Network Access License) is mandatory for all **telecommunications equipment intended to connect to the public telecommunications network** and has a **3-year validity period**. A NAL application can only be issued once SRRC certification has been successfully granted, since SRRC test results are the basis for the NAL Certification. MIIT is also responsible for NAL Certificate issuance.

Note that modular certifications are not allowed, <u>NAL certification</u> is for end-use product only.

NAL/CTA Product Scope

The NAL product scope is made of the following three categories:

- Telecommunications Terminal Equipment (i.e, Fax machine, BP Machines, ...)
- Radio Telecommunication Equipment (i.e, Radio Station, Satellite Earth Stations, ...)
- Internet devices between the network (i.e, Optical Transmission Equipment, Network Access Equipment, ...)

NAL/CTA Certification Step-by-Step

NAL marking by MIIT

The NAL label is issued by MIIT once the application for certification is validated and the certificate is granted. The product must be marked before it is imported, sold, and commercialized in China. The label will include the certification number of the equipment and a specific code.