



# How to Get IoT Network Certified

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## Section 1 Introduction

The [IoT Network Certified™ certification program](#) allows device vendors to demonstrate compliance with globally recognized standards for cellular network connectivity of IoT devices. The process is customized for IoT applications, providing a streamlined and cost-effective pathway to certification. This is through the use of certified modules which take care of most of the requirements to achieve certification.

The program is built upon the [PTCRB certification program](#) which has been certifying cellular-enabled devices since 1997. PTCRB certification processes are leveraged including the certification database and fully certified modules.

### 1.1 Purpose of this Document

This document describes the process to obtain IoT Network Certified certification for cellular-enabled IoT devices.

### 1.2 Certified Modules

You must use a certified module or embedded modem in order for your IoT device to be eligible for certification. The IoT Network Certified website provides a directory of fully certified modules and embedded modems you may incorporate into your device. Browse the directory [here](#) to find one that meets your needs. You may wish to contact a manufacturer to get more information and advice.

### 1.3 Authorized Test Labs

A directory of test labs authorized to conduct certification testing is provided on the IoT Network Certified website. Browse the directory [here](#). You may wish to contact one or more labs to determine which one best meets your needs. Many labs have the capability to assist you with the overall certification process as well.

The test lab will determine what testing is required for your device. Because you are using a fully certified component, the additional testing required to achieve certification is typically limited to network performance, SIM card interface and radiated spurious emissions.

### 1.4 Acronyms and Definitions

Table 1.4-1 Acronyms and Definitions

Acronym	Definition
ECO	Engineering Change Order
GSMA	GSM Association
HW	Hardware
IMEI	International Mobile Equipment Identity
IoT	Internet of Things
PO	Purchase Order
POC	Point of Contact



Acronym	Definition
SVN	Software Version Number
SW	Software
TAC	Type Allocation Code
WWAN	Wireless Wide Area Network



## Section 2 IoT Network Certified for Smart Connected Infrastructure™

### 2.1 Purpose

[IoT Network Certified for Smart Connected Infrastructure](#) provides confidence that devices will perform as expected in critical infrastructure applications (e.g., electric, water, gas). These devices require the highest levels of resiliency and security. Additional testing, beyond the standard requirements for IoT Network Certified, is added to provide this assurance for utility network operators. You may request this specific certification when submitting your certification request.

### 2.2 Additional Testing

IoT Cybersecurity testing (Level 2 - Enterprise Devices) and Utility IoT Device testing are added. You may find the test plans detailing the test requirements [here](#).



## Section 3 Certification Database

The process to obtain certification is managed by the PTCRB certification database. The database also stores the records of certified devices. You will need a database user account to get started.

### 3.1 Requesting Access

To get access to the PTCRB certification database go to <https://certify.ptcrb.com/>, select “New User Registration” and complete the form. The registration must be for a specific individual and the email address used to register must be from a valid company domain.

After the Certification Database Administrator verifies your access request with your company's primary point of contact for the PTCRB certification database, you will receive your username and password by email. If this is the company's first certification database access request, you will be appointed as the primary point of contact.

### 3.2 Navigating the Database

Once you have gained access to the PTCRB certification database and logged in with your username and password, you will see the “Certification Database” tab in the menu header. Within this menu the following items are relevant:

#### 3.2.1 Submit New Request

For submitting new certification requests.

#### 3.2.2 Check/Update Request

For checking and updating certification requests already submitted.

#### 3.2.3 Certified Devices

For viewing all your certified devices. And for viewing all certified modules that you have the option to incorporate into your device.

#### 3.2.4 Withdrawn Requests

For viewing any certification requests you have withdrawn.



## Section 4 Submitting a Certification Request

Before submitting a new certification request, make sure you have collected some key pieces of information ahead of time:

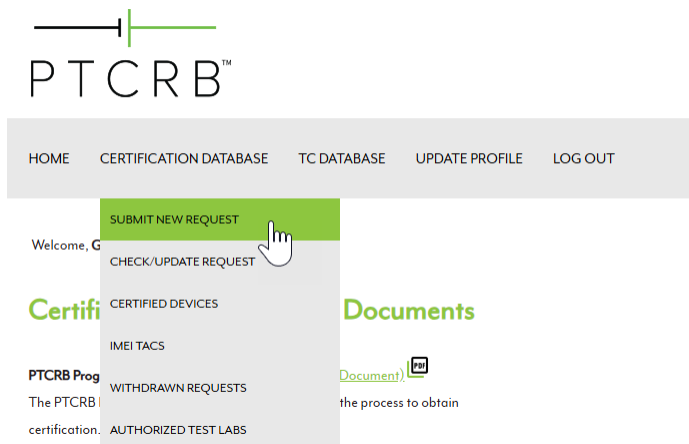
- Talk to your module or embedded modem manufacturer to confirm the configuration you should select for your certification:
  - Model name/number
  - HW and SW version
  - SVN
- Establish which test lab will be performing the certification testing
  - Make sure you are aware of the lab costs and certification timelines before assigning a certification request to the lab
- Make sure you have determined the model name/number of the device you will enter into the database
- Generate a PO number if your organization requires CTIA Certification to put that on the certification fee invoice
  - The certification fee is \$1,500 for an Initial certification request and \$1,000 for a Variant certification request. If you are getting IoT Network Certified for Smart Connected Infrastructure, the fees are \$2,500 for an Initial certification request and \$2,000 for a Variant certification request.
    - There is a \$500 discount for a rebranded device, which is defined as certifying again a device under a new manufacturer and model name/number. A product equality letter and authorization of use letter are required to leverage the test results of the originally certified device. Contact CTIA Certification at [support@ctiacertification.org](mailto:support@ctiacertification.org) for details on the process.

Every effort should be made to enter correct and accurate information into the database when submitting a certification request. Once the test lab accepts the certification request you will be unable to modify the information entered. If you find later that there are mistakes, first contact your test lab, as they are able to update much of this information as they process the certification request.

For any additional updates to your certification request information, please contact CTIA Certification at [support@ctiacertification.org](mailto:support@ctiacertification.org).

### 4.1 New Model

- From the Certification Database tab, select “Submit New Request”





- Select “Initial Certification Request” from the drop-down menu and then select “Continue”
  - If your device is similar to a previously submitted device, you may be able to leverage test results from that device and submit it as a “Variant Certification Request”. Check with your test lab to verify.

[home](#) > [submit new request](#)

## Submit New Request

Please choose the type of request you would like to submit from the following options.

Request Type:

- Initial Certification Request
- Variant Certification Request
- ECO Certification Request
- IMEI TAC Request
- Test IMEI TAC Request

- Select “No” in response to whether a PTCRB TAC Request has been submitted for this device
- Select the type of device you are submitting.
- Indicate whether you are integrating a module or embedded modem.
- If you are integrating a module and your device contains more than one cellular (WWAN) module, select “Yes” for the question, “Does this device contain multiple WWAN modules?” Otherwise, select “No”.
- You may download the IoT Network Certified license agreement for review. Later, you will need to accept the terms and conditions of the agreement before the device can be certified.
- Select “Continue”.

### 4.1.1 Model Name/Number and Module Configuration

- Enter the model name/number for your device. This is the reference by which the device will be certified.

*Note: this model name/number shall identify a single device; wild-card digits are not permitted for naming a device.*

- Optional: You may enter additional marketing name(s) in the optional Marketing Name field. Please enter each name as a separate entry and click “Add” to list each marketing name. Note that multiple marketing names shall all reference back to the same model name/number.
- Search for or select the module or embedded modem which is integrated into the device. And then select the radio button corresponding to the version of that component.



- Select “Continue”.

### Initial Certification Request

Please select the Module in your device and enter the Model Name/Number of your device.

Manufacturer	Initech	Model Name/Number	<input type="text"/>
PTCRB IMEI TAC Request Submitted	No	Marketing Name (Optional)	<input type="text"/>
Device Type	Meter - Parking		<a href="#">Add Another</a>
Multiple Modules	No		
Available Modules	<input type="text"/>		

#### 4.1.2 Device Details

- Review the “Device Characteristics” and check any that apply.
- Upload a photo of your device to appear in the [certified devices directory](#) on the IoT Network Certified website. The image size should be under 200 KB and in jpg, jpeg or png format.
- Identify the target market segments for your device. Multiple market segments may be selected by holding down the “Ctrl” key and selecting multiple options.
- Check the box if the device requires IoT Network Certified for Smart Connected Infrastructure (see [Section 2](#) of this document)

Device Characteristics  Transmits more than 100 kbytes in a transaction.

On average, sends more than 24 transactions per day.

Device & antenna intended to be installed in a fixed orientation relative to horizon.

**i** Device Photo

Market Segment(s)

**i**  This device will be used in critical infrastructure applications and requires IoT Network Certified for Smart Connected Infrastructure™.

- Select “Continue”.
- Review the technologies and bands information, which is inherited from the module or embedded modem you selected. Clicking on each technology will show the bands supported for that technology.

You may uncheck any bands not supported by your device. However, it is not possible to enable any band that was not certified in the module or embedded modem.

Example:



## Technologies/Bands

NR FRI SA 10/10	NR FR2 NSA	NR FRI NSA 4/4	E-UTRA LAA DOWNLINK CA 25/25	E-UTRA CA UPLINK 3/3	E-UTRA CA DOWNLINK 170/170	E-UTRA TDD 9/9	E-UTRA FDD 21/21	UMTS FDD 6/6	GSM
--------------------	------------	-------------------	------------------------------------	----------------------------	----------------------------------	-------------------	---------------------	-----------------	-----

5G

Matched (10)

- Clear
- n2
  - n5
  - n7
  - n25
  - n38
  - n41
  - n66
  - n71
  - n77
  - n78

Back

Continue

Cancel

- Identify whether your device is using the integrated component's regulatory approval ID or has its own regulatory approval ID covering cellular operation. If using your own regulatory approval ID, enter the ID and select "Add".

### Regulatory Approval IDs:

- This device has its own Regulatory Approval IDs
- This device is using the module's Regulatory Approval IDs

Type	ID	Issuing Country	
FCC ID	<input type="text"/>	United States	<input type="button" value="Add"/>

- Enter the HW and SW versions of your device
  - Note that the SW and HW version of the integrated device seeking certification should not be the same as the module versions.
  - If your integrated device does not have integration level SW, indicate a SW version of "0".

HW Version:

SW Version:

- The POC will auto populate based on the user entering the request. Add the billing contact information for the certification fee.
- If a PO number is required in order to process the certification fee invoice and payment, enter a PO number and this will be listed in the invoice. If the PO number is not available yet, this can be added later after the request is submitted.
- Once the invoice is generated, CTIA Certification will send a notification email to the POC and the listed billing contact.
- Select "Continue".



Point of Contact (POC):

POC E-mail:

POC Phone:

Billing Company Name:

Billing Address:

Billing POC:

Billing POC Phone:

Billing POC E-mail:

Purchase Order # (if applicable):

#### 4.1.3 Feature Support

- Features supported by the integrated component shall already be checked when you reach this page.
- Many features must carry over to the IoT device; those are shown with shaded text.
- Select from the remaining any additional features supported by the device.
- Select "Continue".

#### 4.1.4 Selecting the Test Lab

- From the drop-down list, select the test lab who will be performing the certification testing. Contact should have been made with lab prior to entering the certification request in the database.
- Select the point of contact at the lab if known, otherwise select "All"
- If you are not getting IoT Network Certified for Smart Connected Infrastructure, you may add the optional [cybersecurity certification](#) testing by checking the associated box at this time.
- Select "Continue".

Please select a lab and point of contact for the testing.

Primary Lab	Point of Contact
<input type="text" value="Please Select"/>	<input type="text" value="Please select a lab."/>

Please check this box if Cybersecurity Certification Testing is required. *(Optional)*



#### 4.1.5 Specifying the IMEI TAC Information

- In most cases, you may use the integrated component's IMEI TAC. In this case, select the option for using the integrated component's TAC and select the appropriate TACs from the list displayed.
- However, a unique IMEI TAC is required if your production will exceed 100,000 units, if your device disables a radio technology (for example, disabling all 3G or all 4G bands), or if your device integrates a voice-capable component but does not utilize voice functionality. In this case, select from one of the other options and then identify the TAC issuing body. If selecting PTCRB as the issuing body, please complete the additional information requested. There are GSMA fees for TAC allocation. Please see <https://imei.db.gsma.com/imei/tacallocation-termsandconditions> for details.

Please select the IMEI TAC you will be using for certified commercially available products.

- We are requesting a new TAC
  - We are ONLY using the module's TAC
  - We are using the module's TAC AND requesting a new TAC
- Select "Continue".

#### 4.1.6 Selecting the Publish Options

- Once certified, your device will be published on both the IoT Network Certified website and the PTCRB website. You may choose to publish the device when it is certified, or to defer publication for up to 365 days after certification.
- Select "Continue".

Please Select when the device shall be published on the PTCRB website and IoT Network Certified website.

- Publish when certified
- Publish  days after certification



Published Information

*(Manufacturer, Model Name/Number, Device Type, Technologies, Last Certification Date)*



Published Information

*(Manufacturer, Model Name/Number, Market Segments, Device Category, Module, Technologies and Bands, Certification Date)*

Continue

Cancel

#### 4.1.7 Sharing the Certification Request with an Operator

- On the next screen, you will be able to check the box next to any operator(s) you would like to grant access to view your certification request (and any subsequent ECOs of this device model) while the submission is in pending status (prior to being certified).



- You may also modify this selection at any time once you have submitted your certification request.

#### 4.1.8 Accepting the License Agreement

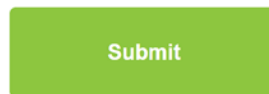
- The certification license agreement must be accepted prior to certification. You may choose to accept the agreement now or come back later to accept it.

##### IoT NETWORK CERTIFIED™ LICENSE AGREEMENT

I understand and acknowledge that my company agrees to the terms and conditions of the certification license agreement for the specified device shown above.

Please [review the agreement](#) and accept below.

- I accept the license agreement terms and conditions.
- I will accept the license agreement terms and conditions later. I understand that this device will not be certified until it is accepted.



Cancel

- Select "Submit" to submit your certification request. Your selected test lab will be notified that they have a certification test request to review and accept. Once accepted, they may begin testing the device.

#### 4.1.9 Uploading Documents

- A product description is required for the certification request. This can be any document, such as a product brochure, describing the device and referencing the manufacturer name and model name/number of the device. You may upload the document now or come back later to do so.
- If you indicated that your device contains multiple radio (WWAN) modules, a "Description of Multiple Modules Implementation" is also required. This document shall:
  - Identify how many modules are in the device
  - Identify the module makes, model names/numbers, and SW versions
  - Indicate whether the modules have a dedicated antenna or share an antenna
  - Indicate whether the modules can transmit simultaneously

## 4.2 Updates to a Model

Certification applies to a specific combination of HW and SW versions for the device. If you would like to certify a different combination of HW and SW an ECO certification request should be submitted.

- From the Certification Database tab, select "Submit New Request"
- Select "ECO Certification Request" from the drop-down menu
- Select "Continue"



## Section 5      Checking Status of a Certification Request

After your certification request is submitted, you can check its status by logging into the certification database. From the Certification Database tab, select “Check/Update Request”. Select the appropriate request # to view the request.

### 5.1      Modifying Information

- Once the test lab accepts the request for testing, you will be unable to modify the certification request information. If you find that there are mistakes, first contact the test lab, as they are able to update much of this information as they process the certification request.
- For any additional updates to your certification request information, please contact CTIA Certification at [support@ctiacertification.org](mailto:support@ctiacertification.org).

### 5.2      Test Results

- The test lab will upload completed test results to the certification database. You can see the test results on the first page of the certification request. Once all required test results are upload and approved by CTIA Certification you will see “TEST REPORT(S) APPROVED” marked as complete on the Requirements Checklist located on the second page of the certification request.

### 5.3      Required Documents

- If you have not yet uploaded the required documents, you may do so at any time on the second page of the certification request.

### 5.4      Certification License Agreement

- If you have not yet accepted the certification license agreement terms and conditions, you may do so at any time on the second page of the certification request.

### 5.5      Certification Fee Payment

- The invoice for the certification fee will be automatically generated as soon as the test lab accepts the request for testing. Once the invoice is available, you will receive a notification via email. The invoice can be downloaded from the PAYMENT RECEIVED section of the Requirements Checklist. Please contact CTIA Certification at [support@ctiacertification.org](mailto:support@ctiacertification.org) with any questions.
- Lab testing fees are not included in this invoice and are determined independently by the test lab.



## Section 6 Certification

Once all certification requirements are met your device will be certified. You can check status of the requirements by viewing the Requirements Checklist as described in [Section 5](#) of this document.

Once certified, you may download a certification certificate and certification logo files. From the Certification Database tab, select "Certified Devices".

Congratulations!





## Section 7 Questions

If you have any questions, please contact CTIA Certification at [support@ctiacertification.org](mailto:support@ctiacertification.org) and one of the certification team members will be happy to assist. If your question is about a specific certification request, please provide the request number in your email to locate it more quickly.



## Appendix A Revision History

Date	Version	Description
December 2021	1.0	Initial release
April 2022	1.1	Added module directory located on website Added Variant certification process
September 2022	1.2	Updated device photo requirements Updated device categories
December 2023	1.3	Added IoT Network Certified for Smart Connected Infrastructure Added ability to select an embedded modem for a device Updated device categories Added rebranding process
October 2024	1.4	Updated certification submission process Clarified that Level 2 IoT Cybersecurity testing is required for Smart Connected Infrastructure

