

# DT Research Rugged Tablet



## BASIC OPERATION GUIDE

# 301Q

## INTRODUCTION

Thank you for acquiring the 301Q, part of DT Research's line of Rugged Tablets. Featuring a slim yet robust enclosure, the 301Q with 10.1" TFT display is powered by the Qualcomm octa-core processor, offering optimal combinations of performance and power savings. The 301Q is available with Android operating system. The software operating system features web browser, client/ server computing software, media player, accessories, and applications support.

## PACKAGE CONTENTS

- One 301Q with Battery Pack and Handstrap
- AC-DC Power Adapter with Power Cord
- Basic Operation Guide

\* If your 301Q contains camera or barcode scanner, please refer to the Tablet Modules Basic Operation Guide for detailed operation.

For the product take-back service information, please visit:  
<http://www.dtresearch.com.tw/zh/About/csr.html>



### Input/ Output Ports

<b>A</b>	Headphone Jack	<b>D</b>	DC-In Jack
<b>B</b>	LAN Port	<b>E</b>	USB Type-C
<b>C</b>	USB 3.0 Port		

### Button Functions

BUTTON	ACTION
<b>1</b>	Power Button
<b>2</b>	Programmable Buttons
<b>3</b>	Battery Latch *Push the switch up to unlock the latch, then slide the latch left to remove the battery.

### PRECAUTIONS

- Always exercise care when operating and handling the 301Q.
- Do NOT apply excessive pressure to the display screen.
- We recommend using the Digital Pen (optional) to keep the screen clean.
- Avoid prolonged exposure of the display panel to any strong heat source. Wherever possible, the 301Q should face away from direct light to reduce glare.
- If the AC-DC power adapter is used to recharge or power the tablet, do NOT use any AC-DC adapter other than the one provided or acquired from the manufacturer or its partners.
- In the unlikely event that smoke, abnormal noise, or strange odor is present, immediately power off the 301Q and disconnect all power sources. Report the problem to your device provider immediately.
- Never attempt to disassemble the 301Q, as this will void the warranty.

### NOTE:

To obtain protection consistent with any IP rating for the device, the I/O (audio, power, USB, card reader, etc.) port doors must be closed. If the IP protection is compromised by mishandling or misuse, such as by leaving port doors open or improperly closed, any resulting product damage will not be covered under any DT Research warranty.

### BASIC FEATURES

The 301Q rugged tablet integrates a bright display, USB ports, and embedded networking elements such as wireless LAN or optional 4G.

A 301Q typically integrates an 802.11ac wireless LAN (WLAN) adapter that may connect to other wireless devices or access points. If your 301Q does not come with such a network adapter, please consult your device provider to establish the desired network connectivity.

## OPERATION

### Powering ON and OFF

To activate the 301Q, push and quickly release the Power Button. The display will come on in a few seconds. To put the 301Q in Standby mode, push and quickly release the Power Button. To turn the 301Q off for extended storage, power off safely using any software function that “shuts down computer” provided in the software operating system.

#### NOTE:

The battery pack shipped with your tablet may be low in power—please use the AC-DC adapter with the 301Q when setting up for the first time to fully charge the battery pack, or use the optional battery charger kit.

#### NOTE:

When the battery pack is charging, the blue-colored Battery LED should blink slowly. If plugging in the AC-DC adapter does not trigger this blinking activity and the LED stays dark, the battery pack(s) may have been drained substantially. Try unplugging/ replugging the AC-DC adapter to the 301Q a few times to activate the charging process.

#### NOTE:

To conserve power, use (push and quick release) the Power Button to put the tablet in “Standby” mode while not in use. Pushing briefly on the same button will wake up the system within seconds.

#### NOTE:

For 301Q, avoid using the Power Button (“hold 4+ seconds” feature) to turn off the tablet—this form of hardware shutdown is intended to be a means of recovery from lockups, and not as normal operation.

### Start Up

If the power up (from Standby mode or otherwise) is successful, the appropriate interface will be displayed after a launch sequence of several seconds. The wireless LAN connection may take 10-15 seconds to be established.

### Configuring the Mobile Tablet

The 301Q may be configured using the utilities and methods dictated by the software operating system. The 301Q should be configurable for various properties such as user profiles, network features, and several system elements.

### Wireless Networking

#### Wireless LAN

The 301Q is often delivered with an embedded (user-inaccessible) 802.11ac WLAN adapter equipped with a hidden custom antenna.

- Through the support of typical WLAN adapters, the 301Q should be able to detect all 802.11 access points in the vicinity for you to select the access point of your choice for connection.
- The SSID and WEP/WPA/WPA2 (if enabled) parameters on the 301Q and the access points have to match. The SSID is case-sensitive and it is recommended that you enable WEP/WPA/WPA2 encryption (or advanced alternatives) for secure access.
- When WEP/WPA/WPA2 is enabled, you may need to consult your network administrator or your networking equipment literature to properly configure associated settings such as Authentication mode, etc.
- Refer to the access point operating manuals for setting up the 802.11 access points.

## USING THE TABLET

### To Hold the Tablet

Left hand: grip the left back side of the tablet with your left hand four index fingers, with thumb resting on the top of the back side of the tablet and palm securely against the back.

Right hand: grip the right back side of the tablet with your right hand four index fingers, with thumb resting on the top of the back side of the tablet and palm securely against the back.



### Peripherals Support

Through its USB ports, the 301Q supports a wide range of USB-based peripherals. These peripherals are applicable for software installation, applications storage, data storage, and system software recovery and updates.

If the 301Q comes with a Mobile broadband module, please contact your product and/or service provider for the SIM Card installation procedures.

## Replacing the Battery Pack

1. Slide the battery latch to the unlocked position.
2. Lift the battery pack off the compartment.
3. Fit another battery pack into place.
4. Slide the latch to the locked position.
5. If you want to purchase extra battery packs, please contact your dealers, or visit our Support page:  
<https://www.dtresearch.com/en/Support/contact.html>

### CAUTION:

There is danger of explosion if the battery is incorrectly replaced. Replace the battery only with the Tablet manufacturer's battery. Discard used batteries according to the dealer's instructions.

### CAUTION:

Do not attempt to disassemble the battery pack.

## Battery Guidelines and Warnings

DT Research tablets and laptops are powered by lithium polymer battery packs in proprietary form factors. Battery configurations for the DT Research devices include internal (bridge or backup), removable or swappable implementations.

Battery usage cycles, or duration between necessary re-charge, vary with a number of factors, including device model, device usage pattern and battery health/aging. The DTR battery packs may be charged while attached to the device or when separated from the device and docked in proprietary battery charging cradles. Following the guidelines on good practice below can help to keep a battery pack healthy and prolong battery usage cycles and battery lifespan.

- For battery safety and optimal functionality and performance, we suggest charging the battery pack between 10 °C ~ 30 °C (50 °F ~ 86 °F).
- Avoid exposing the battery pack to extreme low temperatures or environmental conditions, low temperatures will cause shortened operating time and voltage instability, affecting the ability of the battery to deliver a consistent voltage. The appropriate operating temperature for the battery is 0 °C ~ 50 °C (32 °F ~ 122 °F).
- The battery is a consumable item, the rate of battery deterioration depends on the usage environment. Please be aware that improper usage may accelerate the aging process of the battery, thereby affecting its performance and lifespan. We suggest to replace the battery pack if signs of degradation or reduced performance occur.
- Avoid high heat conditions during operation, idle, charging, and storage states.
- Avoid letting the battery pack remain in very highly charged state or overly low charged state for extensive periods of time. Keeping the battery capacity between 30% and 80% of maximum capacity is recommended. The prevailing battery level(s) can be read from the Battery utility within the operating system.
- Avoid letting the battery be over-discharged or depleted. Over-discharge can occur when a fully-discharged (0% level or thereabouts) battery pack is allowed to remain in such a state for an extended period of time (weeks or months). The embedded battery controls enter a protection mode and recharging will be prevented for safety reasons. To reduce the likelihood of over-discharge, consider recharging idle batteries regularly to some level between 30%-80% of capacity.

- For long term storage, it is recommended that removable battery packs be stored separated from the device. Otherwise, the system should be placed in Shutdown mode. The battery level will decrease with time and it is recommended that the battery packs be monitored or recharged every 2-3 months to maintain battery health. The targeted battery level should be within 30% to 80% of maximum capacity.

## Federal Communication Commission Interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

This Class [B] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.