

Instruction Manual

Nasco Healthcare Next Gen TERi™ & DANi™ Pro



LF04602 - NextGen TERi™ Pro, Light Tone

LF04602M - NextGen TERi™ Pro, Medium Tone

LF04606 - NextGen DANi™ Pro, Light Tone

LF04606M - NextGen DANi™ Pro, Medium Tone

Nasco
HEALTHCARE

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Product Overview

NextGen TERi™ & DANi™ Pro prepares learners for real-world patient care with training solutions that evolve from essential skills to advanced clinical procedures. From basic patient care and vital signs to EMS skills such as airway management, ultrasound, and defibrillation practiced in interactive, team-based scenarios, this product supports all kinds of curriculum needs.

Pro Configurations

TERi™ Versions:

LF04602 – NextGen TERi™ Pro, Light
LF04602M – NextGen TERi™ Pro, Medium

DANi™ Versions:

LF04606 – NextGen DANi™ Pro, Light
LF04606M – NextGen DANi™ Pro, Medium

What's Included

Hardware

- TERi™/DANi™ Patient Skills Trainer + integrated sensors
- 14.4" Patient Monitor w/Case
- 12.4" Controller Tablet
- WiFi Router
- 24" Monitor
- USB Keyboard & Mouse
- Speakers
- Server

Software (Pre-Installed, 5 yr. License)

- Patient Monitoring System Software
- Controller System Software
- Management Software
- Basic Immersive Software

Simulation Devices

- BVM
- ECG Box & Leads
- SpO2 Clip
- Thermometer
- BP Cuff & Module
- Stethoscope Module
- Ultrasound Probe
- Percussion Device
- Defibrillation Handles

Also included: all required accessories including, but not limited to: connective cables, charging cables, batteries and power cables.

Contents will be shipped in the following configuration:

- Box 1: Simulation Devices & Patient Monitor Tablet
- Box 2: Simulation Devices, Wi-Fi Router, USB Keyboard and Mouse
- Box 3: Next Gen TERi™/DANi™ Manikin, BVM, Speaker, and Control Tablet + Accessories.
- Box 4: 24" Monitor
- Box 5: Server with relevant accessories

Features Overview

Patient Care Skills:

- Grooming, bathing, daily living assistance, movement assistance & patient positioning
- Skin care, tracheostomy and wound care
- Pelvic & prostate exams

Airway & Respiratory

- Intubation
- Ventilation with feedback
- CPR with feedback
- Normal & abnormal lung sounds

Vitals Monitoring:

- Blood pressure
- Temperature
- SpO2

Vascular Access & Injections

- ECG placement and monitoring
- Normal & abnormal heart sounds
- Percussion with feedback
- Pulse palpation
- Defibrillation
- Ostomy care, stomas, pericare, and more
- Urinary catheterization
- IV arm
- Intramuscular injections with feedback
- Gastrostomy and NG tube insertion

Diagnostics & Imaging:

- Ultrasound (neck with IV, abdomen, bladder)

Other Features:

- Normal & abnormal bowel sounds
- Palpation with feedback

Scenario Control & Feedback

- Scenarios
- Logs and provides real-time feedback

Product Setup & Preparation

Initial Product Setup

- Unbox the server and plug in to power using included power cable.
- Plug in 24" monitor to power and connect to server via included HDMI cable.
- Connect wireless keyboard and mouse to server via USB plug-in.
- Connect speakers to power with included power cord. Connect to server via included USB cable to activate system sound.
- Position the Wi-Fi router where desired, connect to power, and connect to the server via included ethernet cable.
- Power on the server using power button on front of server. Indicator light on front of server should illuminate and monitor should also turn on.
- Double click the "Immersive" application icon to run the Immersive Software. To start a simulation select "Start Training" on the controller tablet.

Before proceeding to this step, and to ensure full functionality, be sure to complete all battery installations, charge all rechargeable devices, and complete manikin setup according to the following instructions:

Complete battery installation for the following devices (all batteries included):

- Defibrillation paddles (takes 4 AAA batteries)
- SpO2 monitor (takes 2 AAA batteries)
- CPR Feedback Box (takes 6 AAA batteries): Located inside of the manikin. To install batteries, remove genitals, reach into the pelvis and remove the CPR control box which is in place using Velcro, onto the back (interior) side of the pelvis. After installing the batteries, put the box back in on the Velcro pad and re-install the genitals.

Fully charge the following devices via included USB-C cables:

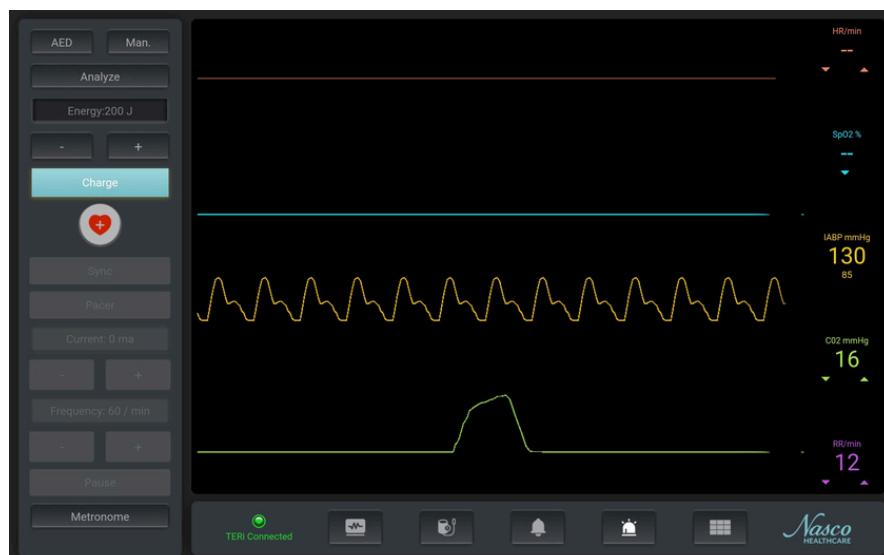
- Stethoscope and ear buds
- Blood Pressure module
- Thermometer
- ECG module
- Percussion device
- Ultrasound probe
- Controller tablet
- Patient Monitor tablet

Manikin setup

- Position the manikin as desired and attach the arms and legs, plugging in all electronic connectors.
- Follow standard manikin setup instructions for TERi™ or DANi™. (See manikin instruction manuals at the end)
- Power on the manikin using silver power switch on rear right hip. Green indicator light on the power switch and on the CPR Feedback box (internal) will illuminate to indicate active status.

Tablet Setup & Instructions

- Once these steps have been completed, turn on the controller tablet and ensure it is on the same network as the server. Swipe up from bottom of screen in landscape view to view all apps. Find and launch the “Controller” app. Select “Connect Device” in upper right hand corner to view connection status to the server and patient monitor.
- Turn on the Patient Monitor tablet and ensure it is on the same network as the server. Swipe up from bottom of screen in landscape view to view all apps. Find and launch the “Monitor” app. View connection status in lower left corner – it should display “TERI Connected” or “DANI Connected” in green when ready.
- On the Controller tablet, tap “Start Training”. Enter Trainee name and select a case from the dropdown list.
- Hit “Yes” to start the simulation.



Immersive Software Operations Guide

Basic Immersive Software: Operations Guide

Upon launch of the Basic Immersive software on the Server, users will encounter a simulated immersive environment with a patient and provider avatar in-situ. Perspective and devices shown will change depending on which skill is being practiced after selection from the simulation menu (referenced below). When the student performs a simulation on the physical manikin using any simulated device, this screen will also show the provider avatar carrying out the same actions on the patient avatar. Depending on the action taken the screen may also display a virtual feedback pop-up.

To the far-right side of the main display, users will find a vertical menu of interactive icons. Below is a guide to their operation:

- Simulation Menu Icon: This icon allows users to select a simulation from the following list: Defibrillation, SpO2, Temperature, Blood Pressure, ECG, Ultrasound, Leg palpation, Percussion, Auscultation, CPR, Intramuscular Injection and Blood gas(Labs), and Glucometer. Selecting any option from the menu prompts a change in the immersive environment. Selections that have already been selected turn and stay green.
- Ultrasound Icon: This allows users to shortcut to the Ultrasound skill module.
- Operations Log Icon: The Operations Log tracks all actions taken by the user during the course of the simulation and is also visible on the controller tablet under Training Log > Operation.
- Device Connection Menu Icon: Click to display the device connection menu, showing the connection and battery status of all integrated devices.
- Case Information Icon: Click to show case information on the patient, such as name, age, gender, difficulty, and case description.
- Exit Icon: Use to exit the program at any time (see note below on how to save and stop a simulation).



Product Use

Feature Overview

Note: only one feature can be run at a time.

Defibrillation

- Click the “Defibrillation” icon to start. *Please note: Virtual Defibrillator that appears on screen is visual only and is not interactive.*
- There are two ways to simulate defibrillation: using the patient monitor and using the defibrillation paddles.

Using the Patient Monitor:

- Select “Man” on the patient monitor
- Set energy values (in Joules) using +/- buttons on the monitor. Energy values will be reflected on the monitor and the virtual defibrillator.
- Press “Charge” on the monitor and wait for a full charge.
- When fully charged, press the red heart-shaped “Shock” icon to simulate an electrical shock.

Using the Defibrillation Paddles:

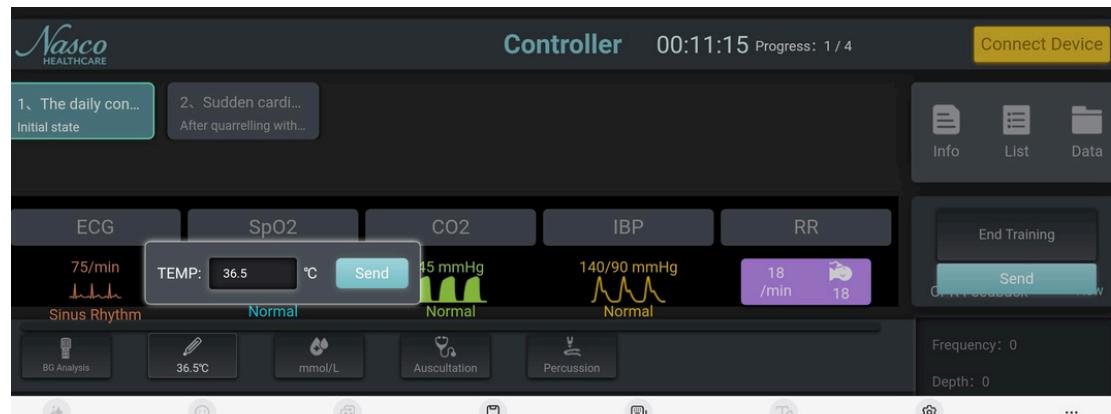
- Pick up the Defibrillation paddles. Press and hold the yellow power button on the left side of left paddle to power on.
- Confirm device connection status on the Monitor.
- Set energy values (in Joules) using selection buttons on the side of the paddle. Energy values will be reflected on the virtual defibrillator.
- Charge the paddles by pressing the “Charge” icon on the left side of the patient monitor OR by tapping the yellow button on the paddles.
- When fully charged, place the paddles on the two defibrillation sites on the manikin. Tap the orange buttons on top the paddles simultaneously to simulate electrical shock.
- Defibrillation will result in affected waveforms.
- Run time, impacts, time since last impact, and Joules are all monitored on the Defibrillation tracking bar at the bottom of the patient monitor.

Product Use



SpO2

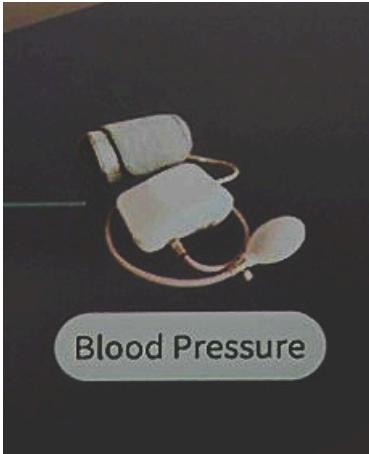
- Click the “SpO2” icon to start. Alternatively, tap SpO2 button on the controller tablet.
- Set SpO2 values on the controller tablet using the sliding blue vertical scale. Press “send”.
- Pick up the SpO2 clip. Press and hold the power button on the top side of the clip until the red interior light illuminates to power on.
- Check device connection status on the Monitor.
- Place the clip on any finger of the manikin and wait for the device to read SpO2. SpO2 values will be reflected on the patient monitor tablet and on the 24" monitor.



Temperature

- Click the “Temperature” icon to start. The 24" monitor will activate accordingly.
- Set temperature by selecting “Temperature” icon on bottom taskbar of the Controller tablet. Input desired temperature and hit “Send”.
- Turn on simulated thermometer by pressing and holding power button. Insert orally or axillary into the manikin and tap the orange button to take temperature.
- Values will appear on both the thermometer and 24" monitor.

Product Use



Blood Pressure

- Click the “Blood Pressure” icon to start.
- Set the blood pressure range on the controller section under “IBP”. Press the IBP button to send to the monitor.
- Press and hold the BP module to turn on and connect.
- Press and hold the stethoscope to turn on and connect.
- Place the BP cuff on the left arm, making sure the black tab is on the inside elbow.
- Place the stethoscope on the inside elbow on top of the black tab.
- On the Immersive Monitor, press play on the BP graph display.
- Begin to pressurize the cuff using the blood pressure inflation bulb and release the pressure using the release valve.
- The real time pressure will appear on the graph and values will appear on the monitor.
- Korotkoff sounds will begin at around 140-150 mmHg.

Product Use



ECG

- Click the “ECG” icon to start.
- **Controller Tablet:**
 - To make sure ECG values (or vital sign values) are being sent from the controller to the patient monitor, ensure that the ECG button on the Controller is selected (highlighted blue). If it is not, values will not display on the patient monitor.
 - Every preset scenario will have its own preset ECG and vital sign values. However, these can be customized using the Controller tablet.
 - To change the heart rate, use the sliding scale under “ECG.” This will be reflected on the patient monitor.
 - To customize waveforms, tap the orange text under “ECG”. From here instructors can select from a menu of various waveforms including Sinus Rhythm, Conduction Block, Myocardial Ischemia, Tachycardia, Recovery, and more. They can also customize the waveform display on the patient monitor. Press “Send” on the controller home screen to send updated values to patient monitor.
- **Patient Monitor:**
 - Students can view ECG waveforms by selecting the ECG icon to the right of the red/green manikin connection status indicator. The monitor also allows students to select the number of visible ECG waveforms.
- **Manikin ECG Module & Feedback:**
 - Connect ECG module to manikin ECG cable coming out of the left side of the manikin. Connect the ECG module to the included electrodes.
 - Power on the ECG module by pressing and holding the power button.
 - Place the electrodes on the manikin in the correct sequence using ECG sites. 24" monitor display will confirm ECG connection.

Product Use

Waveforms

| | |
|---|--|
| Sinus Rhythm | Acute Inferior myocardial infarction STEMI1 |
| Sinus Rhythm 2 | Acute Inferior myocardial infarction STEMI2 |
| Sinus bradycardia with anorexia nervosa | Large anterior myocardial infarction |
| Complete right bundle branch block | Lower myocardial infarction |
| Incomplete right bundle branch block | Ventricular fibrillation 1 |
| Right bundle branch block | Ventricular tachycardia |
| Left bundle branch block | Ventricular escape rhythm |
| LAFB | Front Side NSTEMI |
| Type 1 second degree atrioventricular block | Front STEMI |
| Type 1 first degree atrioventricular block | Lower part STEMI 2 |
| Type 2 second degree atrioventricular block 2:1 | Lower Parts STEMI3 |
| Type 2 second degree atrioventricular block 3:1 | STEMI Inferior 4 |
| Type 2 second degree atrioventricular block 4:1 | Frequency of atrial border treatment and placement |
| 3rd degree atrioventricular block | Interference with R-segment Process |
| Bifascicular block | T Terminal Negative |
| Atrial ventricular rhythm | |

Product Use



Ultrasound

- Click the “Ultrasound” icon to start.
- Turn on the ultrasound probe by pressing and holding the power button.
- Position the probe above the desired ultrasound location.
- Visual feedback will be displayed on the 24" monitor display.
- The ultrasound probe needs to be recalibrated between each new site.



Leg Palpation

- Tap “Leg Palpation” icon to start.
- Palpation site is on interior lower left leg. Immersive display provides feedback on pressure applied during palpation.

Product Use



Percussion

- Click “Percussion” icon to start.
- Ensure wearable percussion device is fully charged and place on the hand using Velcro wrist strap and index finger percussive sleeve. Press and hold power button to turn on the device.
- Perform percussion on the manikin by tapping with index finger on torso while wearing the device. Audio feedback will play through the speaker when percussion is done correctly. The 24" monitor display will act as a site guide if needed.
- Percussion can also be demonstrated by clicking/tapping on any of the 65 percussive sites on the 24" monitor display.
- Instructors can access customization tools via the “Percussion” icon on the bottom taskbar of the controller tablet. This can be used to select what sound the student hears at each percussion site: Resonance, Flatness, Dullness, or Tympany.
- Instructors can also input session notes and feedback in the “Conclusions” dialogue box.

Product Use



Auscultation

- Click the “Auscultation” icon to start.
- Customize auscultation sounds by site by selecting “Auscultation” icon on bottom taskbar of the Controller tablet. From there the instructor can select the sounds the student will hear at each organ group (heart, lung, and bowel). There are 34 heart, 24 lung, and 13 bowel sounds to choose from. Press “send” to ensure sounds are heard during auscultation.
- Turn on simulated stethoscope by pressing and holding power button. Position the stethoscope over desired sites to listen to heart, lung and bowel sounds on the manikin. The 24" monitor display will highlight the sites that are auscultated in real time.
- The manikin includes posterior and anterior auscultation sites. Turn over the manikin to access posterior sites. Use the circular icon under the volume bar on the 24" display monitor to alternate between front and back views in the software.
- There are two audio options through which students can listen to auscultation sounds:
 - USB Speaker: Plug into server to use.
 - Bluetooth Earbuds: Connect using Bluetooth pairing in computer system settings.
- Volume can be adjusted via the keyboard or volume bar on the 24" monitor display.

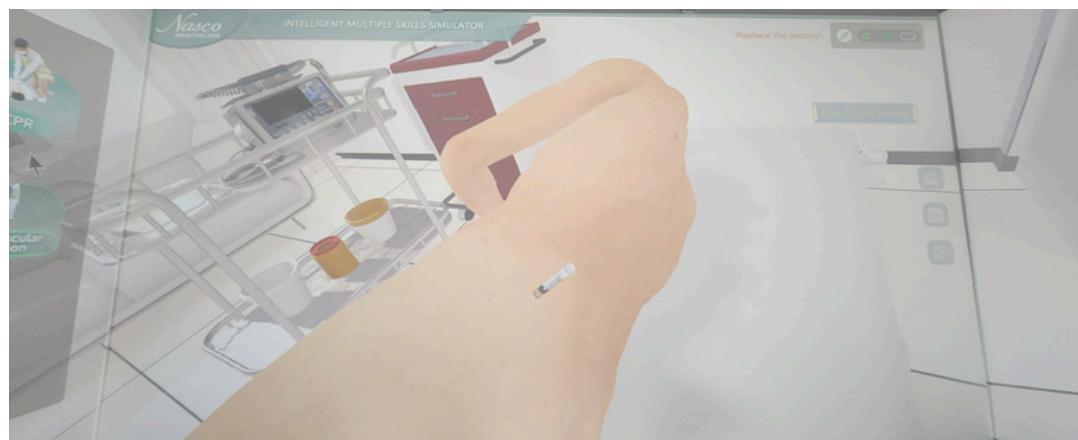
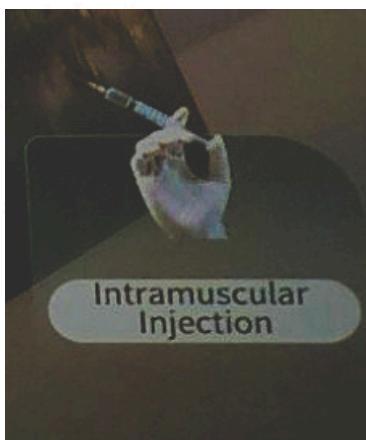
Product Use

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CPR

- Click “CPR” icon to start.
- Position the manikin on its back and perform CPR/Ventilation.
- Compression and Ventilation feedback will be displayed on the 24" monitor. Controller tablet will also display Heart Rate, Ventilation, and Compression feedback. Vital sign changes are also reflected on the Patient Monitor.



Intramuscular Injection

- Click “Intramuscular Injection” icon to start.
- Position the manikin on her side. Injection pad is on the left hip. Inject the manikin (needles not included).
- The 24" monitor will provide feedback on correct needle placement and depth.

General Product Information

Ending a Simulation & Shutting off the Server

- To stop a simulation, exit the immersive software by selecting the “Exit” icon on the bottom right of the 24" Monitor. This will close out the immersive software application.
- On the controller tablet, select “End Training”. The session will be automatically saved. To view all sessions, go to “Training Log”. From there users can view case details such as trainee name, start and end time, duration, status, case logs and basic case information.
- OPTIONAL: Shut down the server by selecting windows icon and clicking power button icon.

General Product Use Notes/Questions

- Batteries and charging cables are included for all devices.
- Users may substitute a larger display for the included 24" monitor if desired without impacting the functionality of the software.
- If either the server, patient monitor, or controller tablet freezes, close out of the simulation and re-start the application. If the server is frozen select Alt+F4 to exit, or select Ctrl + Alt + Delete to pull up Task Manager and “End Task”. From there you can re-start the program.

Cleaning, Maintenance and Storage

General Care

- Most cleaning can be done with a soft cloth, mild soap, and warm water. Avoid over washing the painted areas on the manikin.
- Stubborn stains can be treated by using Nasco Cleaner and a soft cloth.
- Stains caused by make-up, ink, and newsprint are indelible and cannot be removed. Avoid contact with these substances and do not apply cosmetics or Betadine® solution to the manikin.
- Follow cleaning, care, storage, and maintenance guidelines in each section of this manual.
- Remove all batteries prior to storing your equipment for future use.

Cautions

Solvents or corrosive materials will damage the simulator. Never place the simulator on any kind of printed paper or plastic. These materials will transfer indelible stains. Ball-point pens will also make indelible stains. Do not store in direct sunlight.

Storage

In order to prepare the manikin for storage perform a normal manikin breakdown procedure by removing all of its limbs and packaging them neatly in its case (preferably in the same packaging offered when first purchased). In addition, be certain to follow these instructions:

- Storage temperature should not exceed 122° F (50° C) or fall below 41° F (5° C) on a (noncondensing) relative humidity free environment.
- If a soft-sided case is being used, the manikin should lie flat.
- The manikin should NEVER be stored or shipped with fluids in the system.

Extension/Upgrade Options

NextGen TERi™ & DANi™ is a modular and scalable product platform. To upgrade from one tier to the next, please contact your sales director to upgrade software and purchase additional required simulated medical devices.

If your software license is due to expire, please contact your sales director to extend your software license.

Warranty/Software License

| Item | Warranty |
|---------------------------|---|
| Manikin | 5-year warranty on manikin; 2-year warranty on embedded electronics |
| Patient Monitor Tablet | See manufacturer's warranty (if any) |
| Patient Monitor Case | 2-year warranty |
| Controller Tablet | See manufacturer's warranty (if any) |
| WiFi Router | See manufacturer's warranty (if any) |
| 24" Monitor | See manufacturer's warranty (if any) |
| Keyboard | See manufacturer's warranty (if any) |
| Mouse | See manufacturer's warranty (if any) |
| Server | See manufacturer's warranty (if any) |
| Speakers | See manufacturer's warranty (if any) |
| Simulated Medical Devices | 2-year warranty |

Warranty/Software License

| Item | Warranty/License |
|------------------------------------|-----------------------------------|
| Patient Monitoring System Software | 5-year warranty/perpetual license |
| Controller System Software | 5-year warranty/perpetual license |
| Basic Immersive Software | 5-year warranty/license |
| Management Software | 5-year warranty/license |

Specifications

Controller Tablet

- 12.4-inch Dynamic AMOLED 2X display
- 1752×2800 resolution
- 120Hz refresh rate
- 12GB RAM and up to 512GB internal storage
- Connectivity: USB-C 3.2
- Wi-Fi 6E
- Bluetooth 5.3
- OS: Android 14

Monitor Tablet

- **Xiaomi:**
 - 14-inch LCD display
 - 2880×1800 resolution
 - 120Hz refresh rate
 - 16GB
 - Connectivity: Wi-Fi 6
 - Bluetooth 5.3
 - USB-C
 - OS: Android 14.
- **Samsung Galaxy S10**
 - 14.1-inch version
 - LCD display
 - 120Hz refresh rate
 - 16GB RAM
 - OS: Android 14

Specifications

Server

- 4x HDMI output ports
- Operating System: Windows 11
- Memory: 32GB RAM
- Storage: High-capacity SSD
- Dedicated graphics support for multi-display output
- Multiple USB ports for peripherals
- Gigabit Ethernet and Wi-Fi connectivity
- Optimized for simulation software performance

WiFi Router

- Dual-band Wi-Fi 6
- 2.4GHz: 574Mbps; 5GHz: 2402Mbps.
- Qualcomm IPQ5000 dual-core 1.0GHz CPU with dedicated NPU
- 256MB RAM
- WPA3 encryption
- Mesh networking, and app/web management
- Ports: 1x Gigabit WAN, 3x Gigabit LAN.