11 Specifications

Model	STAREK 324 NWM Data Terminal
Power	5 V DC, 1 A, into the POWER terminal. A 5 V 1 A adapter is supplied
Signal ports	4 ports (PORT 1–4), each with +5 V, IN, OUT and GND. Each input can read an on/off or an analog signal
Bus terminals	RS485 / Modbus, Serial (RX / TX), I²C (SCL / SDA)
Wireless	Wi-Fi 2.4 GHz only (5 GHz networks are not supported)
Display	128 × 64 monochrome OLED
Controls	Rotary knob (turn and press), reset button
Indicators	Power and activity lights; a red (IN) and green (OUT) light for each port
If Wi-Fi drops	Readings are kept on the device and sent when the connection returns
Updates	Firmware updates arrive over the air from STAREK

12 Troubleshooting

Screen stays dark	Check the adapter, the socket and the POWER terminal (+5 V and GND the right way round).
No setup network on the phone	Restart the terminal and press the knob while it shows **Press for setup**.
Setup page does not open	Make sure the phone is still joined to the terminal's network, then open **`192.168.4.1`**.
Does not join factory Wi-Fi	Check the password and that the network is 2.4 GHz and in range.
Stays on *Provisioning*	Send the hardware ID to STAREK support. Monitoring starts once STAREK provisions the terminal.
No machine data on the dashboard	Check the port, the cable and that the machine is powered. Look for ⚠ in the status bar.
Warning or Halted screen	Note the message, pick an action with the knob and press. If it comes back, call support.

YOUR TERMINAL

Hardware ID _____

Machine / location _____

The hardware ID (starts with STK) is on the product label and on the screen at power-on.

Need help?

Call +91 95607 97982
Email touch@starek.in
Web www.starek.in
Hours Mon – Fri, 10:00 – 18:00 IST

When you contact us, share the hardware ID, the site and machine, the message on the screen, and a photo of the screen or the wiring.

Scan for the full user manual

STAREK

Your Factory! Live!

GETTING STARTED GUIDE

324 NWM Data Terminal

Connect your machines. See every shift, live.



4 signal ports
On/off and analog machine signals

RS485 / Modbus
PLCs, meters and controllers

Serial & I²C
Instruments and smart sensors

Wi-Fi 2.4 GHz
Secure link to the STAREK cloud

Built-in display
Status at a glance on the floor

01 What's in the box

324 NWM terminal
Display, knob and terminal blocks

5 V 1 A power adapter
Use only this or a STAREK-approved one

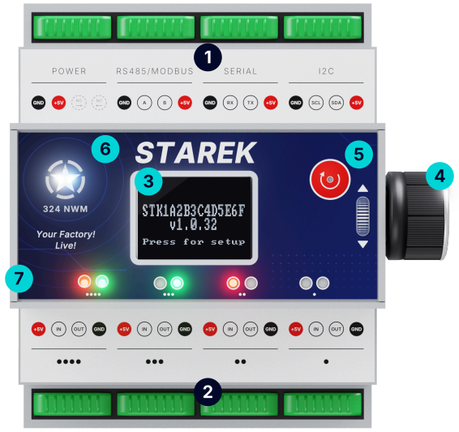
This guide
Keep it near the terminal

Provisioning QR card
Only with pre-provisioned units

02 Before you begin

- **Switch off the machine side** before you wire anything. Machine-side electrical work must be done by a qualified electrician or a STAREK installation partner.
- **2.4 GHz Wi-Fi** name and password for the factory network. 5 GHz is not supported.
- **Know your signals:** which machine output, sensor or controller each port will read.
- **A smartphone** to scan the setup QR code on the screen.
- **Mount indoors**, dry, away from heat, liquids and heavy vibration, within range of the Wi-Fi.

03 Know your terminal

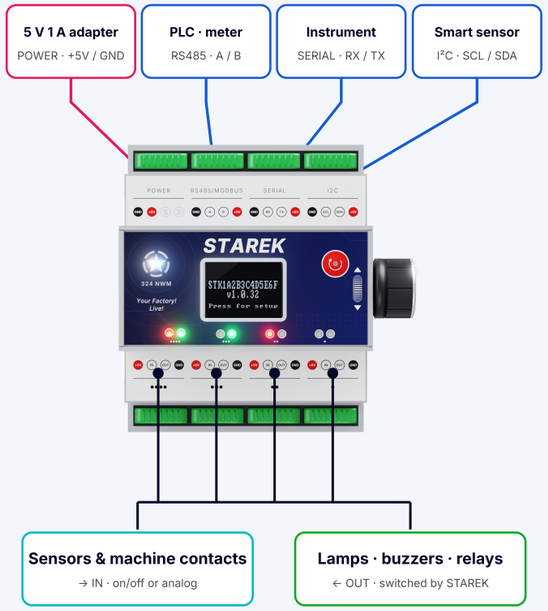


1. **Bus terminals** POWER, RS485, SERIAL, I²C
2. **Signal ports** PORT 4 · 3 · 2 · 1 (dots = port number)
3. **Display** setup, status and messages
4. **Knob** turn to move, press to choose
5. **Reset** restarts; setup is kept
6. **Star** power (white) and activity (blue) lights
7. **Port lights** one pair per port: red = input active, green = output on

Red dot ● = +5 V · Black dot ● = GND · Open ring ○ = signal

04 Wiring & installation

Match each sensor or machine signal to the terminal shown. Pull the green plug-in blocks off to wire them, then push them back firmly.



Terminal	Connect
POWER	● +5 V and ● GND from the supplied 5 V 1 A adapter. The two NC poles stay empty.
PORT 1–4 · IN	A machine run/stop contact, push button, limit or proximity switch, or an analog sensor (pressure, level, temperature, current).
PORT 1–4 · OUT	An output the terminal switches: an indicator lamp, buzzer or relay input.
RS485 / MODBUS	A and B lines to a PLC, energy meter or controller.
SERIAL	RX / TX to a serial instrument. Cross them over: device TX → terminal RX.
I²C	SCL / SDA to a STAREK-compatible smart sensor.

Simple steps

1. Switch off the machine and keep the terminal unplugged.
2. Wire each signal to its port or bus terminal (table above). Check +5 V and GND are never swapped.
3. Wire the supplied 5 V 1 A adapter to **POWER**, then plug the adapter into the wall socket.
4. Tell STAREK which signal is on which port. We set up the ports from the cloud; no settings are needed on the device.

Never connect mains voltage to any terminal. Disconnect power before you change any wiring. Unsure which terminal to use? Call us before you connect.

05 Power on



Start-up screen
Shows the hardware ID and the firmware version for a few seconds. **Press the knob now** to open Wi-Fi setup. A new terminal opens it by itself.

06 Connect to Wi-Fi

1. **Join the terminal's setup network.** Scan the QR code on the screen with your phone camera. Or turn the knob to see the network name and password and type them in.


Scan to join



...or type these

2. **Open the setup page.** The screen shows *Connected*. Open **192.168.4.1** in the browser, or press the knob and scan the second QR code.



Phone connected


Press: QR for the page

3. **Pick the factory Wi-Fi**, enter its password and save. The setup network closes and the terminal joins your Wi-Fi.

07 Registration & provisioning

On first start the terminal registers itself with STAREK and waits to be provisioned: linked to your account, plant and machine. This takes a minute or two.



Registering (first start only)



Waiting for STAREK

Stays on Provisioning? Send the hardware ID to STAREK support. Pre-provisioned units skip this wait. Once provisioned, the terminal restarts, reads its ports and starts monitoring.

Lights on the terminal

- ○ **Power** (white): on while the terminal has power
- ● **Activity** (blue): a double flash every 5 s = running normally; fast flashing = halted, read the screen
- ●● **Port pair**: red = the port's input is active, green = its output is on

Normal running needs no action at the terminal.

Day-to-day use ›

08 The home screen



In normal operation the terminal runs on its own. Status icons sit in the top bar; the date and time, or a short message, in the bottom bar. **DOWN** in large letters means downtime is marked.

- **Configured** and monitoring
- **Heartbeat** sent to STAREK
- **Readings** being sent
- **A signal fault:** check the port wiring
- **STAREK cloud** connected
- **Wi-Fi** connected
- **Crossed** = link lost; **dot** = connecting. Readings are kept and sent when the link returns.



Downtime marked



Wi-Fi lost: readings are kept

09 Knob & menu

Press
Open the menu from the home screen

Turn
Move between items and options

Press
Choose. The menu closes after 30 s idle

Set downtime	Mark the machine down; *Clear downtime* ends it
Job display	Show or hide the job name
Attributes	View the device settings
Firmware	See the version; check for an update
Restart	Restarts; Wi-Fi and setup are kept. Asks Yes / No first
Factory reset	Erases Wi-Fi and setup. Use only when moving sites or when support asks
Back	Returns to the home screen

10 On-screen messages



Notice · Warning · Halted
Turn the knob to pick an action, press to run it. **RETRY** runs by itself after 15 s; **RECONFIGURE** reopens Wi-Fi setup.



Firmware update
Arrives from STAREK and restarts the terminal when done. **Do not power off.**

© STAREK · v1.1 · Nov 2026