AndonTap

BY ALTITUDE AP

DIN-RAIL MACHINE MONITOR · V6

Every machine. Every minute.

Stack light + machine signals + spindle CT → AndonTap → Modbus TCP / EtherNet/IP

Quick Start Guide

PRELIMINARY · REV 0.2 · HW V6 · FW 1.5 · 2026-11-09

⚠ DANGER: 120 VAC · READ BEFORE WIRING

- **Qualified personnel only.** Follow local electrical codes.
- **IN1-4: one voltage per group** (shared COM-A): all 120 VAC or all 24 VDC, one circuit.
- **IN5-8 are 24 VDC only.** No 120 V on the 7-pin plug, CT plugs, power plug or USB-C.
- **De-energise and lock out** every circuit before wiring or unplugging.
- **Never mix 120 V and 24 V** on the same COM.
- **CTs:** 333 mV / 1 V output only. Never a 1 A / 5 A current-output CT.

1 Mount | 2 Wire | 3 Power | 4 Connect | 5 LED check

QR PLACEHOLDER

Full manual, wiring diagrams and setup

andontap.com/manual

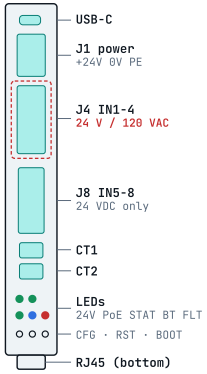
Setup app: **andontap.com/downloads**. This guide covers mount, wire, power, connect and the LED check.

1 Mount TS35 DIN RAIL · 26.4 MM WIDE

1. Hold the module upright, **USB-C end up**, RJ45 end down.
2. Hook the back over the **upper** rail lip, push the bottom in until the latch snaps. Fit the end stop.
3. To remove: screwdriver in the pull-rod loop at the bottom, pull down, tilt off.

- Leave both end walls (vent slots) clear.
- Route 120 V wiring (IN1-4) apart from 24 V and CT wiring.
- For Bluetooth setup, open the steel panel door.

2 Wire PLUGS OUT, POWER OFF · PIN 1 = TOP



PLUG	PIN: SIGNAL	CONNECT TO
J1	1 +24V · 2 0V · 3 PE	24 VDC supply; PE to the earth bar Optional when powered by PoE
J4	1 COM-A · 2 IN1 · 3 IN2 · 4 IN3 · 5 IN4	Stack-light lamp terminals; COM-A to the lamp common (neutral, or 0 V / +24 V) Factory: IN1 red, IN2 amber, IN3 green. 24 VDC (any polarity) or 120 VAC, one voltage for all four.
J8	1 24V OUT · 2 0V · 3 COM-B · 4-7 IN5-IN8	Door, feed hold, part count, M-code, sensors (24 VDC only) IN5-8 FIRMWARE PLANNED One COM-B: all sourcing or all sinking. ON at about 8 V. 24V OUT: on-board, 0.1 A fused, works on PoE too.
CT1 · CT2	1 · 2	CT leads (either way round). CT1 = spindle, CT2 = auxiliary Clamp around one phase conductor only, arrow toward the load.
RJ45	–	Plant Ethernet switch; 802.3af PoE can power the unit

J8 WIRING	COM-B TO	SIGNAL WIRING
Dry contact	0V (pin 2)	24V OUT → contact → IN
PNP sensor	0V (pin 2)	BN 24V OUT · BU 0V · BK → IN
NPN sensor	24V OUT (pin 1)	BN 24V OUT · BU 0V · BK → IN
Machine 24 V signal	cabinet 0 V	Cabinet +24 V → machine contact / output → IN

Ferrules (not included) on stranded wire: **0.75-1.0 mm²** (18 AWG) in J1 and J4 (5.08 mm plugs), **0.5 mm²** (20 AWG) in J8 and the CT plugs (3.5 mm). TO BE CONFIRMED Wire range and torque: plug maker's data.

3 Power 24 VDC ON J1 AND / OR POE

- Plug in all terminals, then switch on the **24 VDC** and/or connect the **PoE** cable. Both at once is fine.
- **24V** LED: DC on J1. **PoE** LED: PoE power. 24V off with DC connected: polarity reversed (pin 1 = +24V).

> If J1 is wired to the machine's own 24 V, turn on **"J1 is wired to the machine's 24 V supply"** in setup so the unit reports **Off** when the machine is switched off.

4 Connect: set the IP address NEW UNITS ARE SILENT UNTIL SET

SETUP APP (RECOMMENDED)

1. Open `cncmon_setup.html` (andontap.com/downloads) in Chrome or Edge.
2. Connect by **USB-C**, or by **Bluetooth** to `CNCMON-XXXXXX`. New units: Bluetooth is on (BT blinks); otherwise **short-press CFG** (10 min).
3. **Network & security** → Static → IP, mask, gateway (0.0.0.0 if none) → **Write to unit**. It restarts on its address.

Precaution: switch off the 120 VAC on IN1-4 before plugging in USB-C (isolation barrier not yet lab-evaluated), or use Bluetooth.

OR TYPE IT (USB-C SERIAL / BLE UART)

```
ip static 10.20.30.40 255.255.255.0 10.20.30.1
status
```

- **DHCP:** `ip dhcp`; host name `cncmon-xxxxxx`.
- **Clients:** Modbus TCP 502, EtherNet/IP 44818 (I/O UDP 2222).
- **Wrong address?** Hold CFG 10 s: clears IP and PIN, Bluetooth on.

5 LED check

LED	GOOD	OTHERWISE
24V / PoE	On per source	Off: no power from it
STATUS	**On**: link + IP	Blinking: no address, no cable, or waiting for DHCP
BT	Off after setup	Slow blink: setup open · on: connected
FAULT	**Off**	On: internal chip not answering; run `status`, call support
RJ45 jack	Green on, yellow flickers	Green off: cable or switch port

THEN, IN THE SETUP APP

- **Stack light:** rows light live; check red, amber, green. With FW 1.5 leave inputs 5 and 6 **Unused**.
- **Spindle & CTs:** CT rating, 333 mV / 1 V, wire passes; capture idle and cutting currents.
- **Machine:** name and asset ID.
- **Data map & export:** Kepware tag CSV or Studio 5000 UDT.

Done. The unit is serving machine state, counts and run time. More: andontap.com/manual

IN THE BOX TO BE CONFIRMED

- AndonTap V6 unit, all mating plugs fitted: 3-pin power (+24V / 0V / PE), 5-pin IN1-4, 7-pin IN5-8, two 2-pin CT
- This Quick Start Guide
- Write-on input label sheet
- DIN-rail end stop
- **CT bundle only:** one split-core CT

NOT INCLUDED

- USB-C cable and Ethernet cable not included.
- Ferrules (sizes on page 2).
- **LoRaWAN units:** Antenna sold separately – required before enabling LoRaWAN. The radio stays off until LoRaWAN is enabled in setup.

YOU ALSO NEED

- 24 VDC supply, or an 802.3af PoE switch port (PoE is built into every unit)
- Split-core CT(s), 333 mV or 1 V output
- Small flat screwdriver, ferrule crimper

FOR SETUP

- Laptop with Chrome / Edge and a USB-C cable, or an Android phone (Chrome) / iPhone (Bluefy)
- Setup app `cncmon_setup.html` from andontap.com/downloads
- IP address, mask and gateway from the network admin

FULL MANUAL AND SUPPORT

AndonTap V6 User Manual: configuration, PLC integration, firmware updates, troubleshooting.

andontap.com/manual · andontap.com/downloads

Support: support@altitudeap.com

AndonTap · Stands alone. Better with FloorPulse.

Preliminary document: ratings and contents are subject to change. For use inside an IP20 control panel. Keep this guide with the panel documentation.