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Q330M+

AUG MEETING – CALGARY, ALBERTA

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Q330M+ Overview

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Q330M+ Overview

Features

- CD1.1, native Q330, and SeedLink communication protocols
- Data packet authentication via Spyrus Authenticator device (DSA, ECDSA)
- PTP Timing option
- High input impedance and gain settings of 1, 2, 4, 8, 16, 32, 64, 128 for passive sensors selectable per sensor group
- Webserver for setup and configuration via GUI
- Optional Auxiliary Channel Processor (ACP) adds 5 16-bit auxiliary channels and one serial digital interface for environmental sensors
- Digital I/O for vault intrusion switch
- Dedicated power input for sensor power

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Technical Specifications

- 3 or 6 main channels with 24-bits
- 6 auxiliary channels with 8-bits
- Over 50 SOH channels (temperature, voltages, currents, GPS status, sensor boom positions)
- 141dB RMS sine wave dynamic range (≃ 150dB peak-to-peak sine wave
- Configurable linear or minimum-phase filtering
- Sample rates 1000, 500, 250, 200, 100, 50, 40, 20, 10, 1
- Time accuracy < 1µs when locked to GPS or PTP server
- Wide input voltage range 9-36VDC (nominal 12V)
- Temperature range -20° to +60°C (fully specified); -40° to +70°C (guaranteed operative)
- Sensor control lock/unlock & re-center
- Calibration functions step, low-THD sine wave, MLS or random binary

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Data

- (1) Ethernet port 10/100BaseT (full Linux IP protocol stack, hardcoded non-routable IP address: 169.254.10.10/16)
- (3) Virtual data ports: CD1.1, native Q330, and SeedLink
- (1) USB2.0
- (2) Console ports at 115kbaud
- Data storage on PC/MAC/Linux-formatted removable SLC SD card, standard 8GB (up to 32GB)
- Data copying or mirroring on optional external USB flash, standard 64GB (up to 256GB)

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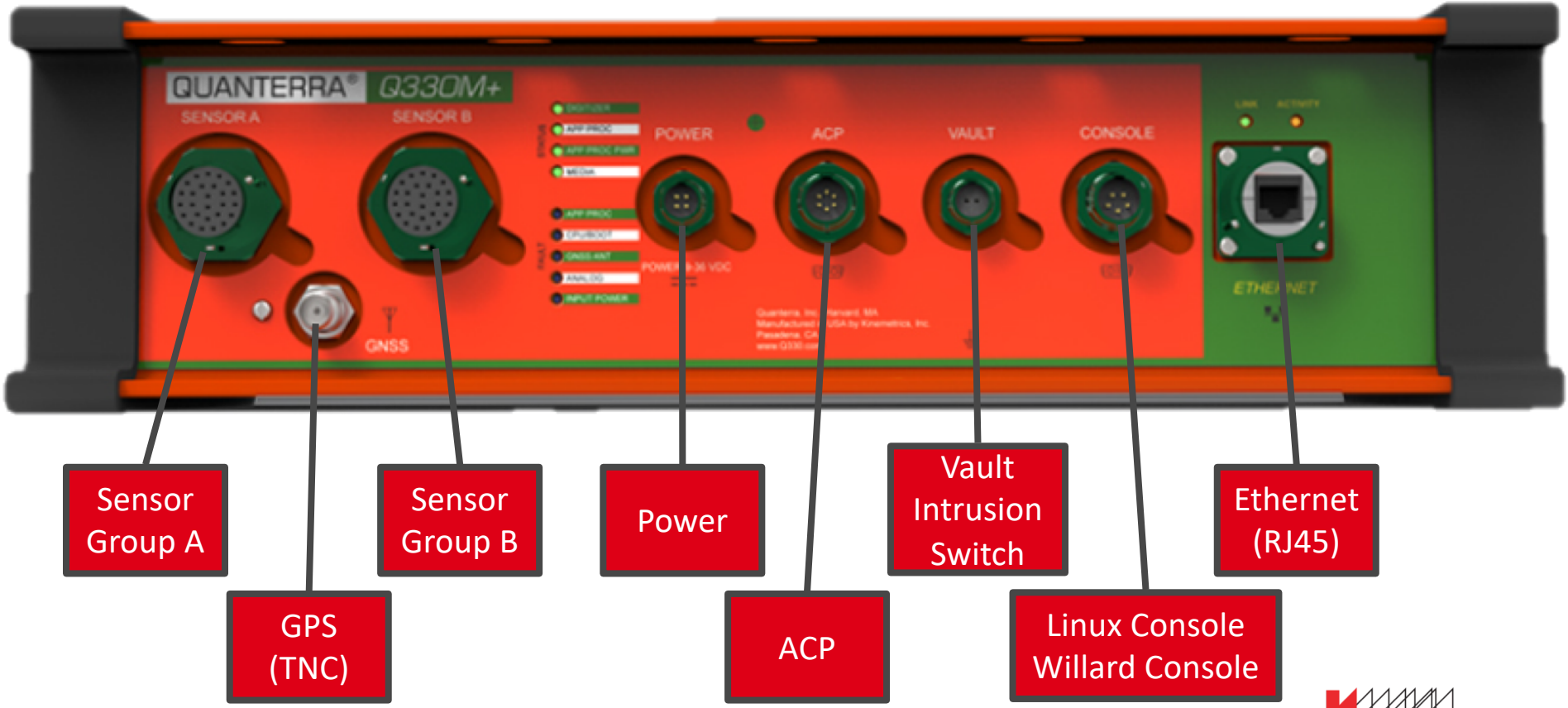
Connections



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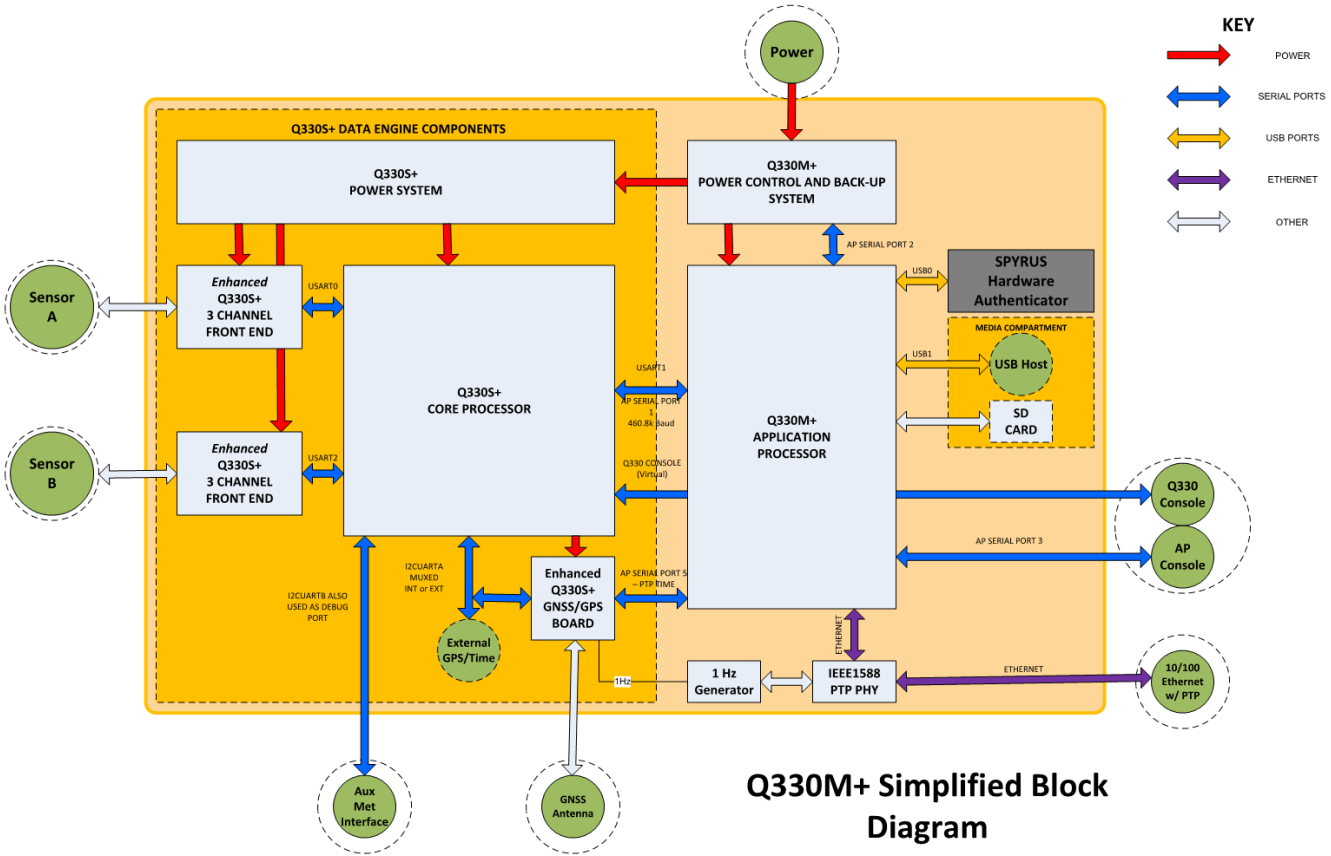
Simplified Block Diagram



Q330M+ Simplified Block Diagram

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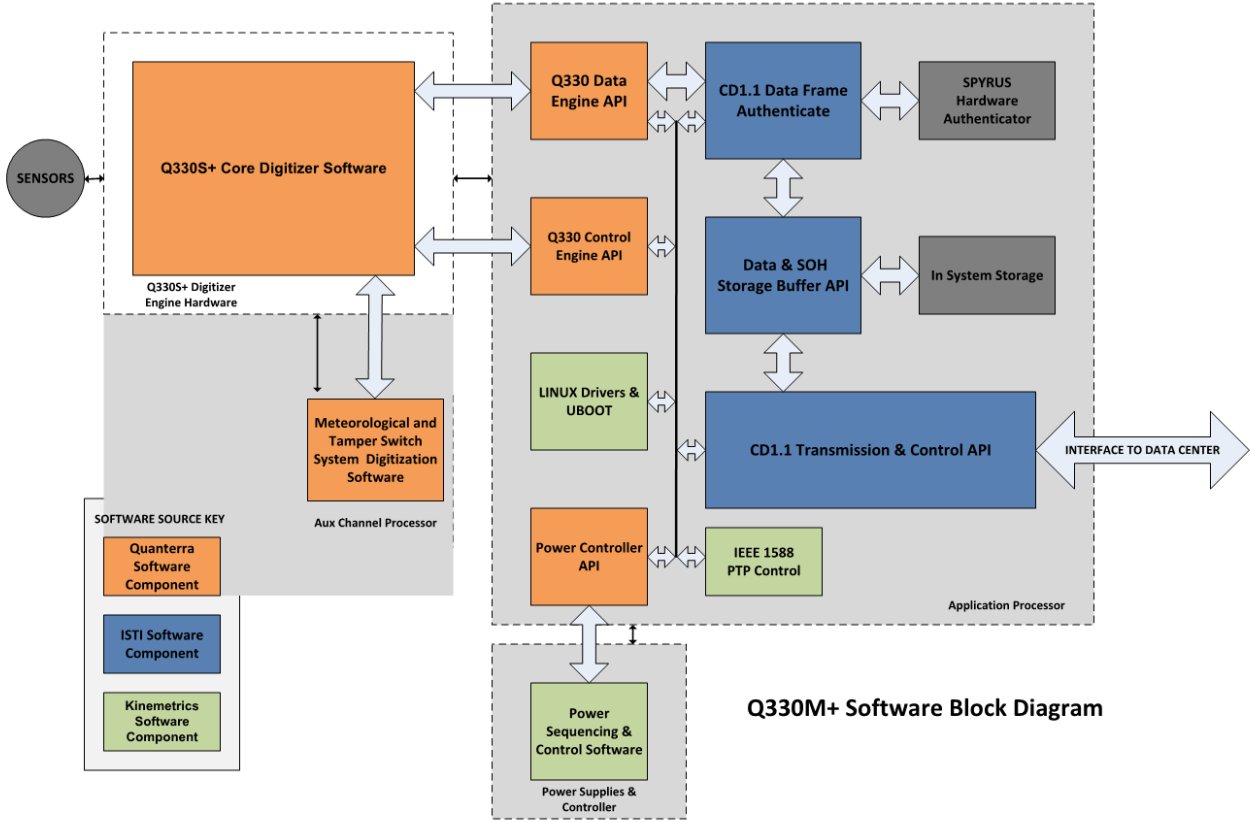
Software Block Diagram



Q330M+ Software Block Diagram

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How to Communicate with the Q330M+

Console Connection

Procedure

A. Establish Connection to the Linux console

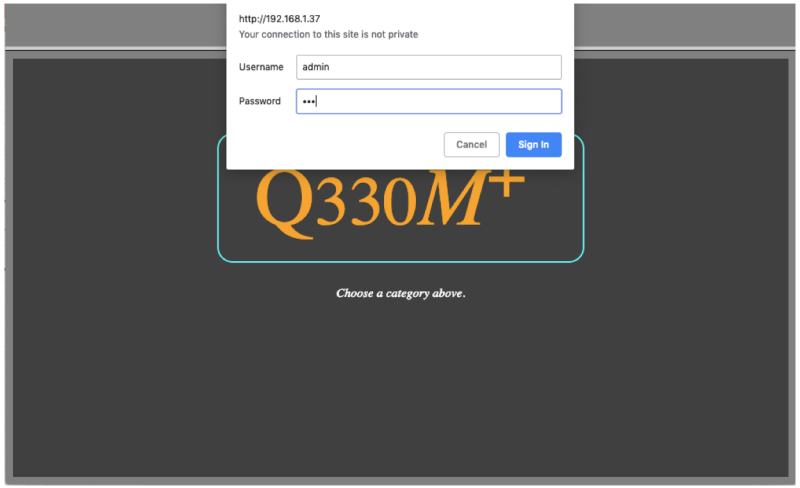
1. Connect console cable to ‘Console’ interface
2. Connect 9-pin D-sub connector labeled ‘L’ to computer
3. Using a serial client (e.g., minicom, PuTTY) stablish an RS-232 (asynchronous serial) communication at with 115.2kbaud, 8 bit, no parity, and 1 stop bit (8N1)
4. At the login prompt enter ”root” and then the password “kmi”

B. Establish Connection to the Quanterra console

1. Connect console cable to ‘Console’ interface
2. Connect 9-pin D-sub connector labeled ‘Q’ to computer
3. Using Willard as usual

How to Communicate with the Q330M+

Web Interface



Procedure

A. Establish Connection with the hardcoded IP Address
   1. Connect Ethernet Cable between Q330M+ and Laptop
   2. Configure NIC of laptop, e.g., 169.254.10.222/16
   3. Open browser and type in 169.254.10.10
   4. Enter Username: admin; and Password: kmi

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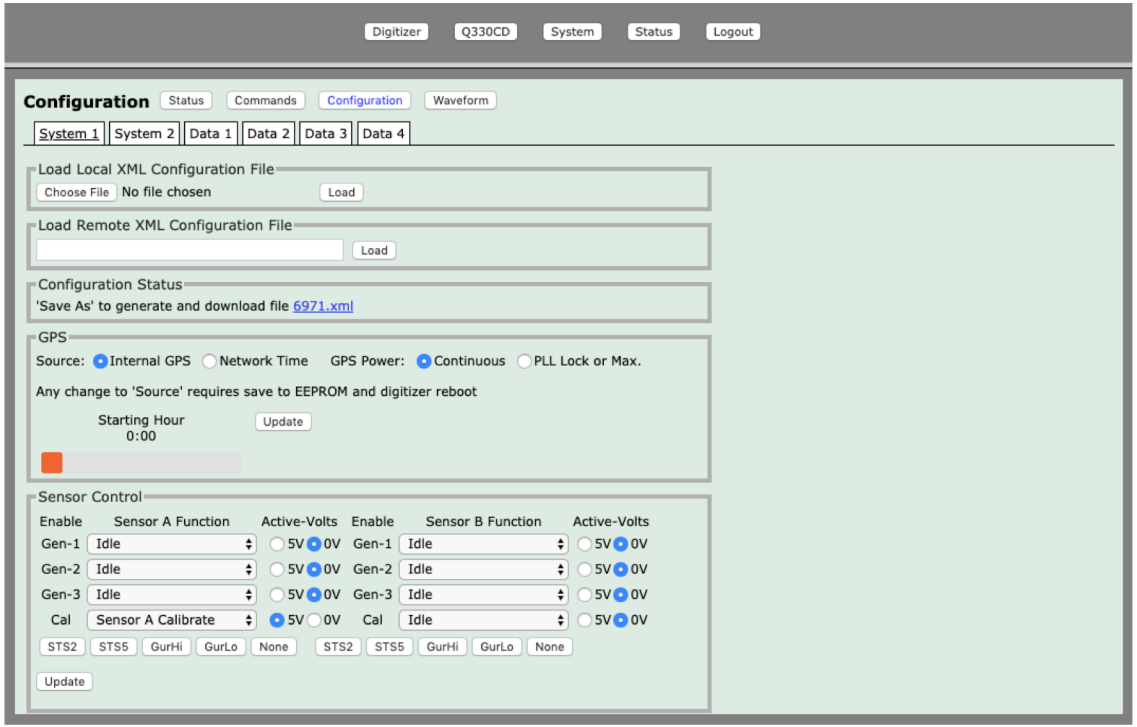
How to Communicate with the Q330M+

Web Interface

Q330



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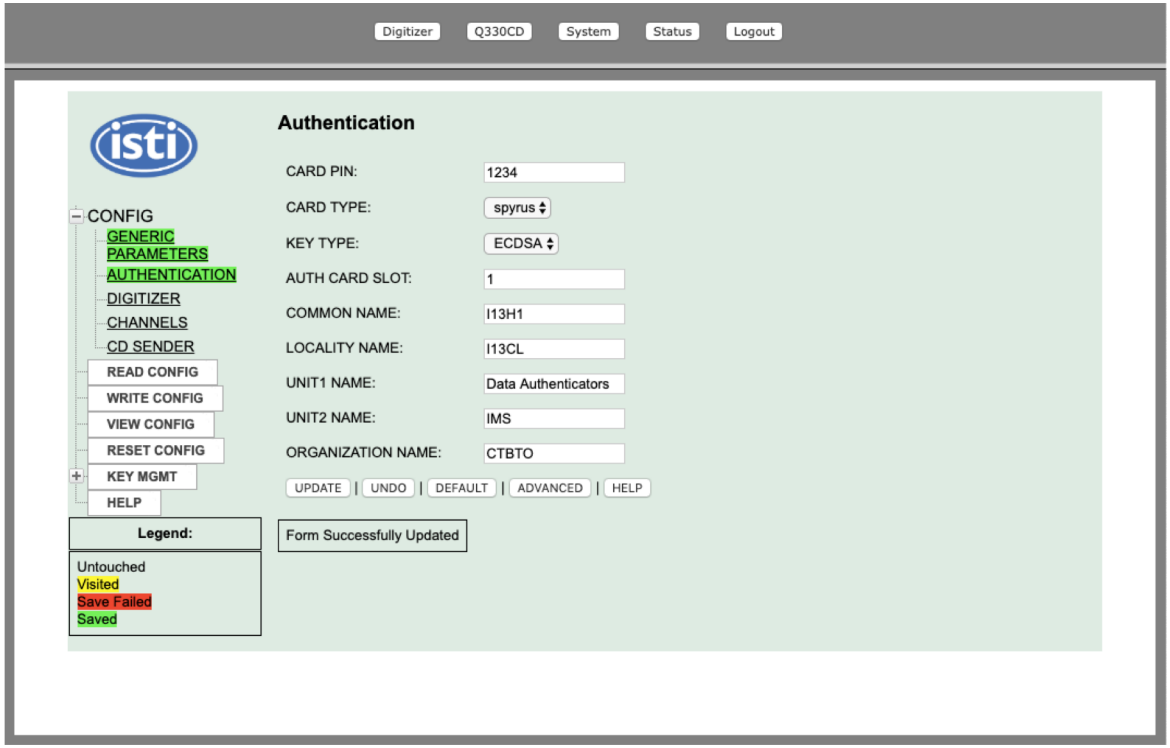
How to Communicate with the Q330M+

Web Interface

SSI



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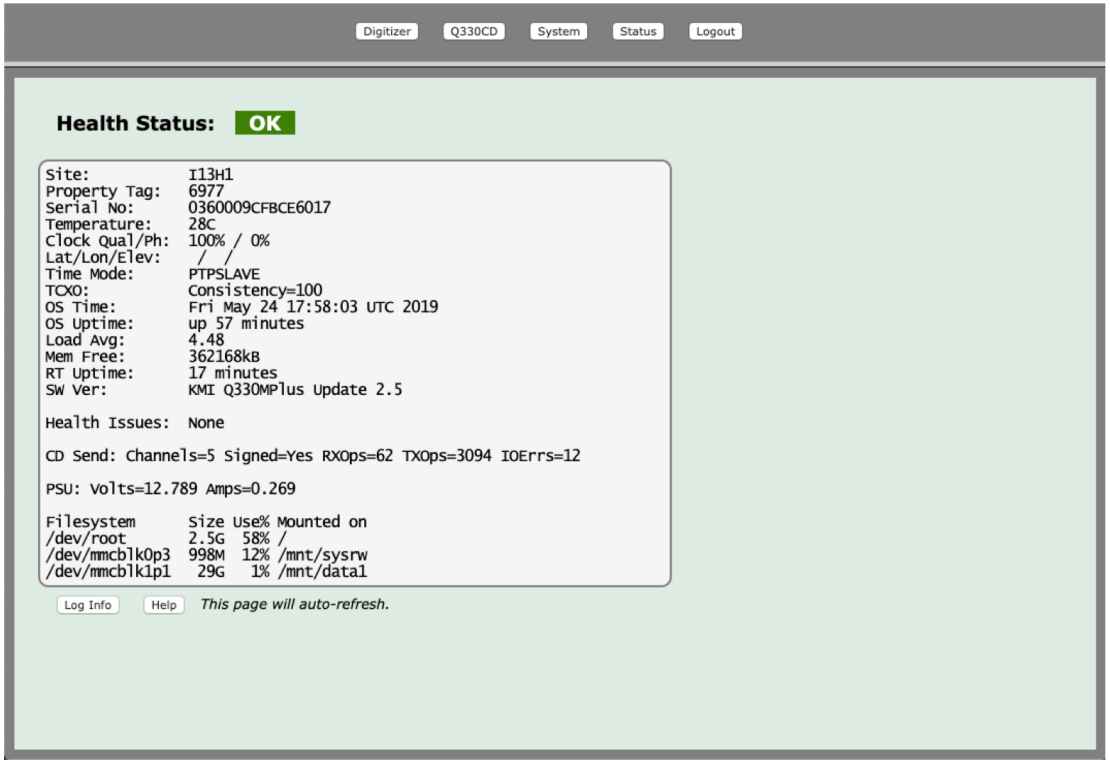
How to Communicate with the Q330M+

Web Interface

Status



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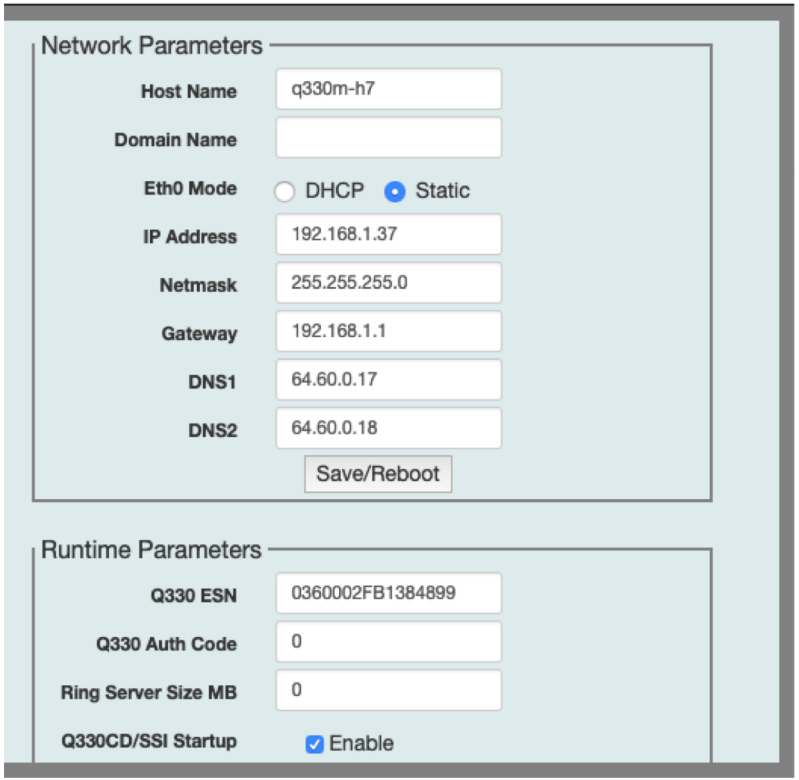
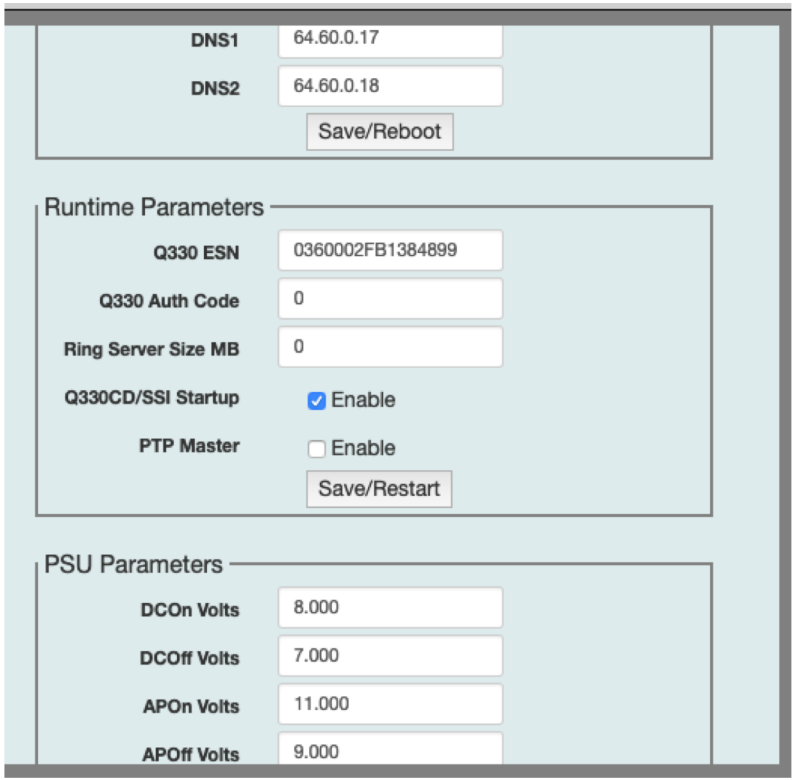
How to Communicate with the Q330M+

Web Interface

System





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Thank You
Questions?

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