



## Firmware Release Notes

<b>Model</b>	Oxygen 3 / Oxygen 3 Plus
<b>Version</b>	5.3.7

## Version 5.3.7

### Release Date

- Oct 2021

### New

- Handling of "Denial of Service, Message Bomb". Added rate limiting.

### Changes

- Only TLS 1.2 is now allowed for HTTPS access to the device
- Removed Ciphers that are considered insecure

### Fixes

- "cfgtool" configuration utility not allowing URL for destinations (RADIUS, CPE monitoring)
- Firmware upgrade utility not properly handling bad blocks in flash memory

## Version 5.3.6

### Release Date

- Apr 2020

### New

- Added Web GUI inactive session timeout
- Added Web GUI logout feature
- Verizon support for the EPO6-A

### Changes

- Upgraded ssh server to v2017.75 to fix vulnerability

- Web GUI now returns no-store directive to prevent leaking sensitive information

## Fixes

- CCM Client memory leak with invalid CCM configuration

## Version 5.3.5

### Release Date

- Feb 2020

### New

- None

### Changes

- None

### Fixes

- Fixed HSPA RAT query with the EP06-A affecting cell driver operation during rare transient events

## Version 5.3.4

### Release Date

- Jan 2020

### New

- WWAN MTU size is now configurable to accommodate APNs supporting MTU sizes above 1428. The allowed range is 1280-1500.

## Changes

- None

## Fixes

- Fixed HSPA RAT display with the EP06-A

## Version 5.3.3

### Release Date

- Jul 2019

### New

- None

## Changes

- None

## Fixes

- Fixed EP06-A dialer initialization handshake
- Fixed network watchdog ICMP ping not working correctly on some networks
- Fixed network watchdog reboot timeout fault cases

## Version 5.3.2

### Release Date

- May 2019

## New

- None

## Changes

- Added an option to force SNMP traps to go over GRE

## Fixes

- Fixed EP06-A dialer not waiting long enough for the module to respond after reset.

## Version 5.3.0

### Release Date

- Apr 2019

## New

- Added DHCP relay feature
- Improved diagnostics in device GUI

## Changes

- None

## Fixes

- Fixed band 17 advertising with the EP06-A

## Version 5.2.2

### Release Date

- Mar 2019

### New

- Configuration export/import now includes TLS certificates

### Changes

- None

### Fixes

- Cellular network time not obtained with Quectel EP06-A

## Version 5.2.1

### Release Date

- Jan 2019

### New

- CPE Monitoring over WiFi
- Added the ability to disable DHCP server for secondary IP
- Added Ec/Io reporting for Sierra Wireless modules

### Changes

- Removed background ping affecting the routing table
- Removed Throughput Limit feature

## Fixes

- Ethernet port cycling in pass through modes when WWAN connection is established
- Refresh link not working from dashboard

## Version 5.2.0

### Release Date

- Nov 2018

### New

- Add support for Quectel EP06

### Changes

- Always try software cell module restart first, hard power-cycle only if soft restart fails. This change is done to prevent MC7455 module corruption.
- Ensure unidrv releases ports before failsafe config reset
- Ensure unidrv releases ttyUSBx ports before netwd reboot

### Fixes

- Fixed wrongfully shown web GUI password change error page
- Netwd bugfix: no reboot if reboot timer is set without ping timer set as well
- Fixed up dialer script to handle PDP authentication

## Version 5.1.4

### Release Date

- Jul 2018

## New

- None

## Changes

- Go offline before doing LTE/WCDMA band changes

## Fixes

- None

## Version 5.1.2

### Release Date

- May 2018

## New

- Added 5th and 6th IPsec local network
- Added SWI DM file script for capturing QXDM in the field

## Changes

- Switch registration detection to polling vs. notifications
- Shut down cell module gracefully before power-cycle
- Changed IPsec default timeout from 5min to 2min

## Fixes

- Fixed running WLAN traffic over IPsec
- Fix to reset redial delay timer if ql-dial receives SIGABRT
- Fix for failing ql-dial WDA initialization
- Fixed IPsec bug related to /32 masks



## Version 5.1.0

### Release Date

- Jan 2018

### New

- Added MAC-based whitelist feature to WiFi captive portal
- Added VLAN uplink failover capability
- Added QoS option for voice traffic (DSCP = 46)
- Added optional support for Telit LM940 module (LTE Band 66 support)
- Syslog now supports to support TLS encrypted remote logging
- Added Layer-2 GRE tunneling feature
- DHCP server: added feature to specify arbitrary option to send to clients
- Added Proxy / Redirect feature for client pings to reduce WWAN traffic

### Changes

- Allow limited DHCP ranges for WiFi captive portal
- SNMP MIB file enhancements and cleanup
- Default configuration now leaves WiFi/LAN bridging disabled
- Linux kernel upgrade to version 4.9
- WWAN dialer now sets PDP context before checking for registration (decreases connection setup delay)
- Added session ID mechanism to web GUI
- Always auto-initiate IPsec P2 SAs when tunnel(s) get established
- Update status in GUI more quickly when switching from CA to non-CA mode

### Fixes

- Reset monthly Tx/Rx byte counter even if device was turned off on reset date
- IPsec: ensure that data for local subnets is never routed across tunnel, even if networks overlap
- Fixed reboot bug when applying failsafe configuration

## Version 5.0.6

### Release Date

- 22 Nov 2017

### New

- Show WWAN Cell-ID on web GUI overview screen

### Changes

- Set default WWAN MTU to 1428
- Adjusting TCP MSS to 1388

### Fixes

- Allow more time for retrieving ICCID from SIM
- Fixed occasional RSRQ reporting glitch
- IPsec web GUI fix to accept SHA256/384/512 P2 config values
- Linux kernel usbnet bugfix for incoming packets larger than configured WWAN MTU
- Fix: allow traffic between bridge interfaces

## Version 5.0.2

### Release Date

- 14 Jul 2017

### New

- Added support for Oxygen-3 Plus (uses Cat.6 LTE modem, Gig-Ethernet interface)
- Added QOS for routing protocols
- Added authentication option to 'ssh to serial port' feature
- Added VLAN trunk support (up to 4 VLANs)
- IPsec: added support for multiple local encrypted networks
- Added feature to route all incoming GRE traffic to LAN

- Added 'celltool' CLI script for extended WWAN modem debugging

## Changes

- Dropped obsolete ciphers and added more modern ones to HTTPS web GUI
- Now using a more secure 3072 bit RSA certificate for HTTPS
- Linux kernel upgrade to 4.4
- Improved internal WWAN connection manager (dialer) architecture
- Detect O3 hardware revision (now part of version string)
- Improved WCDMA and LTE band selection to make it much more flexible and allow multi-band
- Changed default status logging interval to 15 minutes
- Misc. SNMP fixes and enhancements

## Fixes

- Bugfix: GUI-based SNAT/DNAT rules will be added on top so that they always take precedence
- Properly display USB port info on 'System Status' web gui page
- Fixed SNMP MIB cypGwCpeState up/down reversal
- Bugfix: don't send CPE up/down trap when SNMP daemon (re-)starts

## Version 4.9.0

### Release Date

- 7 Dec 2016

### New

- Added direct SSH-to-serial-port feature
- Added 'oxycom' serial console CLI script
- Added GRE tunnel feature
- Added feature to obtain (local-) time from cellular network
- Added feature to run an NTP server on the Oxygen to provide time to attached devices

## Changes

- Added syslog entries to track reversal to default or failsafe config
- Added syslog entry to track DC power being applied to the O3
- NAT: perform 'endpoint independant NAT mapping' whenever possible
- Enabled proxy-ARP by default

## Fixes

- Cell module: implemented workaround for obscure DHCP netmask bug
- Fixed SNMP process not staying up if captive portal is enabled and SNMP config is changed
- Fix: 'reset to factory default' now also resets radio-connected/disconnected script

## Version 4.8.1

### Release Date

- 11 Aug 2016

### New

### Changes

### Fixes

- fixed SSH/RADIUS regression bug that was present since 4.6.x

## Version 4.8.0

### Release Date

- 10 Aug 2016

### New

- Added option to select scope of NAT (LAN or everything)

### Changes

- DHCP lease time now adjustable from 2 min. to 1 week
- Increased IPsec window size from 4 to 16 to improve Cisco ASA interoperability

- Improved IPsec DPD processing to enhance Cisco ASA interoperability

## Fixes

- Fix to correctly block all outgoing packets with wrong source IP
- ccm-client bugfix to resolve sudden process restart

## Version 4.7.3

### Release Date

- 31 May 2016

### New

- Added support for external RS232 serial port connector

### Changes

### Fixes

- Fixed ccm-client to prevent lock-ups

## Version 4.7.0

### Release Date

- 13 May 2016

### New

- Added SNMPv3 support
- Added WWAN SIM PIN support

## Changes

- Minor changes to factory default config
- Block SNMP traffic on LAN network- and broadcast addresses

## Fixes

- Fixed local DNS which was not working when set to static DNS IPs with no DHCP

## Version 4.4.1

### Release Date

- 13 Jul 2015

## New

- Added IPsec support
- Added CPE monitoring
- Added Ethernet link toggle when WAN IP changes
- Added fail safe firmware upgrade
- Added fail safe configuration feature
- Added support for Cypress Cloud Manager (CCM)
- Added Captive Portal feature
- Added support for Verizon requirements

## Changes

- LTE band selection
- Enforcing 8 character minimum password requirement

## Fixes

- Improved analog signal sampling to avoid spurious trap triggering
- Fixed missing cell ID when on 3G

## Technical Support

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Support Group**

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