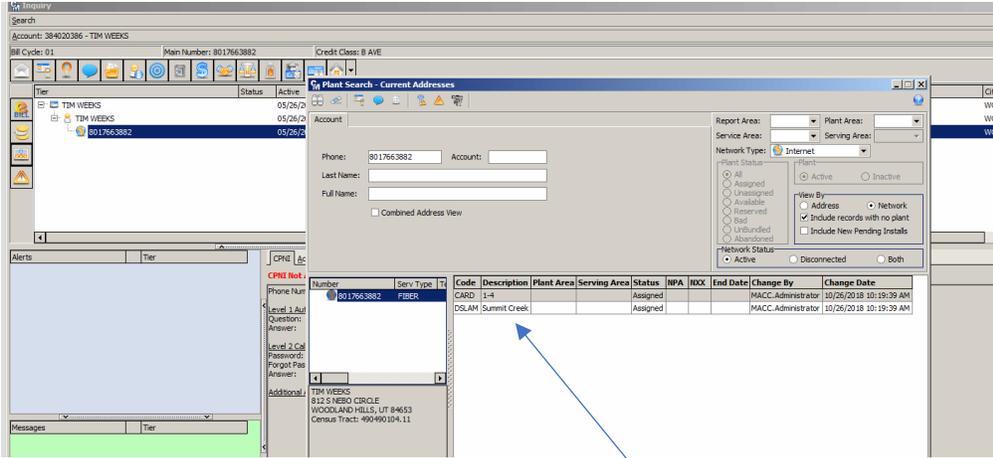


# Troubleshooting Fiber to the Home

Look up customer in MACC or get card and port info from CSR



Like DSL it will tell you where the customer is located. The number refers to GPON-ONU/ONT

Once you have that info open the Links Sheet and open the GPON that your customer is located on

<p><b>MICROS</b>  <a href="#">Beaver Mountain Zyxel</a>  <a href="#">Birdseye</a></p> <p><b>Bridgerland</b>  <a href="#">Bridgerland Zyxel</a></p> <p><a href="#">Canal Canyon</a>  <a href="#">Clear Creek</a>  <a href="#">Colton Micro</a></p> <p><b>Crawford</b>  <a href="#">Crawford 1</a> <a href="#">Crawford 2</a></p> <p><b>Ditto</b>  <a href="#">Ditto</a> <a href="#">Ditto 2</a></p> <p><b>Elberta</b>  <a href="#">Elberta South</a> <a href="#">Elberta South 2</a></p> <p><a href="#">Ensign Ranch</a></p> <p><a href="#">Moroni Hill</a>  <a href="#">Mosida</a>  <a href="#">Nephi Canyon</a>  <a href="#">Panorama Woods ZyXel (Indiana)</a>  <a href="#">Sheep Creek</a>  <a href="#">Skull Valley Zyxel</a>  <a href="#">Skyview</a></p>	<p><b>Calix OCCAM</b>  <a href="#">Aspen Cove</a>  <a href="#">Birdseye</a></p> <p><b>Bluewater</b>  <a href="#">Bluewater 1</a> <a href="#">Bluewater 2</a> <a href="#">Bluewater 3</a> <a href="#">Bluewater 4</a> <a href="#">Bluewater 12</a></p> <p><a href="#">Bolotas</a></p> <p><b>Boys Ranch</b>  <a href="#">Boys Ranch 1</a> <a href="#">Boys Ranch 12</a></p> <p><b>Bridgerland</b>  <a href="#">Bridgerland 1</a> <a href="#">Bridgerland 2</a></p> <p><a href="#">Campervorld</a></p> <p><b>Chester</b>  <a href="#">Chester 1</a> <a href="#">Chester 12</a></p> <p><b>Covered Bridge</b>  <a href="#">Covered Bridge 1</a> <a href="#">Covered Bridge 2</a> <a href="#">Covered Bridge 3</a></p> <p><a href="#">Edge of Eden</a></p> <p><b>Elberta</b>  <a href="#">Elberta</a> <a href="#">Elberta South</a></p> <p><a href="#">Eureka</a></p>	<p><b>Calix OCCAM Cont.</b></p> <p><b>Mt. Pleasant Hospital</b>  <a href="#">Mt. Pleasant Hospital 1</a> <a href="#">Mt. Pleasant Hospital 2</a>  <a href="#">Mt. Pleasant Hospital 3</a> <a href="#">Mt. Pleasant Hospital 12</a></p> <p><b>Scotfield</b>  <a href="#">Scotfield 1</a> <a href="#">Scotfield 2</a></p> <p><a href="#">SCO MO HO</a></p> <p><b>Skyline Mountain</b>  <a href="#">Skyline Mountain 1</a> <a href="#">Skyline Mountain 12</a></p> <p><a href="#">Soldier Summit</a></p> <p><a href="#">Spring City</a></p> <p><b>Sunderland</b>  <a href="#">Sunderland Calix 1</a> <a href="#">Sunderland Calix 2</a></p> <p><b>Swan Creek</b>  <a href="#">Swan Creek 1</a> <a href="#">Swan Creek 2</a></p> <p><a href="#">Sweetwater Trailer</a></p> <p><a href="#">Thistle</a></p> <p><b>Wales</b>  <a href="#">Wales 1</a> <a href="#">Wales 2</a> <a href="#">Wales 3</a> <a href="#">Wales 12</a></p>	<p><b>FTTH Fiber To The Home</b></p> <p><b>Brookline Condos</b>  <a href="#">466 467 473 474 476</a>  <a href="#">479 482 483 488</a></p> <p><a href="#">2395 2447 2452 2457</a>  <a href="#">2472 2487 2497 2510</a>  <a href="#">2510E 2515 2517 2520</a>  <a href="#">2522 2525 2527 2530</a>  <a href="#">2542 2547 2577</a>  <a href="#">Svslog</a></p> <p><b>Calix E7 GPON</b>  <a href="#">Nephi Vault</a>  <a href="#">Santaquin CO</a>  <a href="#">Summit Creek</a></p> <p><b>Ubiquiti GPON</b>  <a href="#">AF NOC</a>  <a href="#">Richfield</a>  <a href="#">Willow Creek</a>  <a href="#">Automall</a>  <a href="#">Dugway CO</a>  <a href="#">Spanish Fork Vault</a></p> <p><b>Updated 04/09/2019</b></p>
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All fiber GPON's are located on the right

We will go over the Calix GPON info first

Click on the GPON your customer is on and login



E7

UNIFIEDACCESS

User Name   
Password

After login in you will need to select the card and GPON and ONT that you want to view

The screenshot shows the Calix E7 management interface. On the left is a navigation tree with 'E7' expanded, showing 'Shelf1 (MCC)', 'Card2 (GPON-8)', 'GPON 1', and 'ONT 4'. The main panel displays configuration for 'ONT 4 ( Location - GPONPort:1-2-1 )'. The configuration includes fields for Admin State (enabled), Serial # (2053F1), Registration ID, Subscriber ID (Tim Weeks), Description (Lot #7), PWE3 Profile, ONT Profile (B44G), Upstream SDBER Rate (5), NE Rx Optical Power Low Threshold (-30.00), NE Rx Optical Power High Threshold (-7.00), Battery Present (enable), Poe Max Power Budget (30), and Poe High Power Mode (disabled). Below this is the 'ONT Status 4' section, showing Operational Status (enable), Additional Status (child-prov present), Model (B44GE-1), Vendor (CXNK), CLEI (BVMCE10ARA), Downstream SDBER Rate (5), System Uptime (114 days, 00:38:23), Optical Signal Level (-13.000), Transmit Optical LV (1.000), Receive Level at OLT (-15.600), Current Downstream SDBER Rate (9), Current Upstream SDBER Rate (9), Range Length (1262), Product Code (P0), and Current Software Version (12.2.8.4.9). At the bottom, an 'Alarms' table shows an alarm with ID 6, Type ONT, Severity MN, Alarm Code ONT-BATTERY-MISSI..., Alarm Description ONT battery is missing, Date and Time 2019/04/26 17:04:58.98, and Status N.

This will give you the information you need to verify and troubleshoot the customer.

If online (Enabled on, Disabled off)

Verify the Customer info

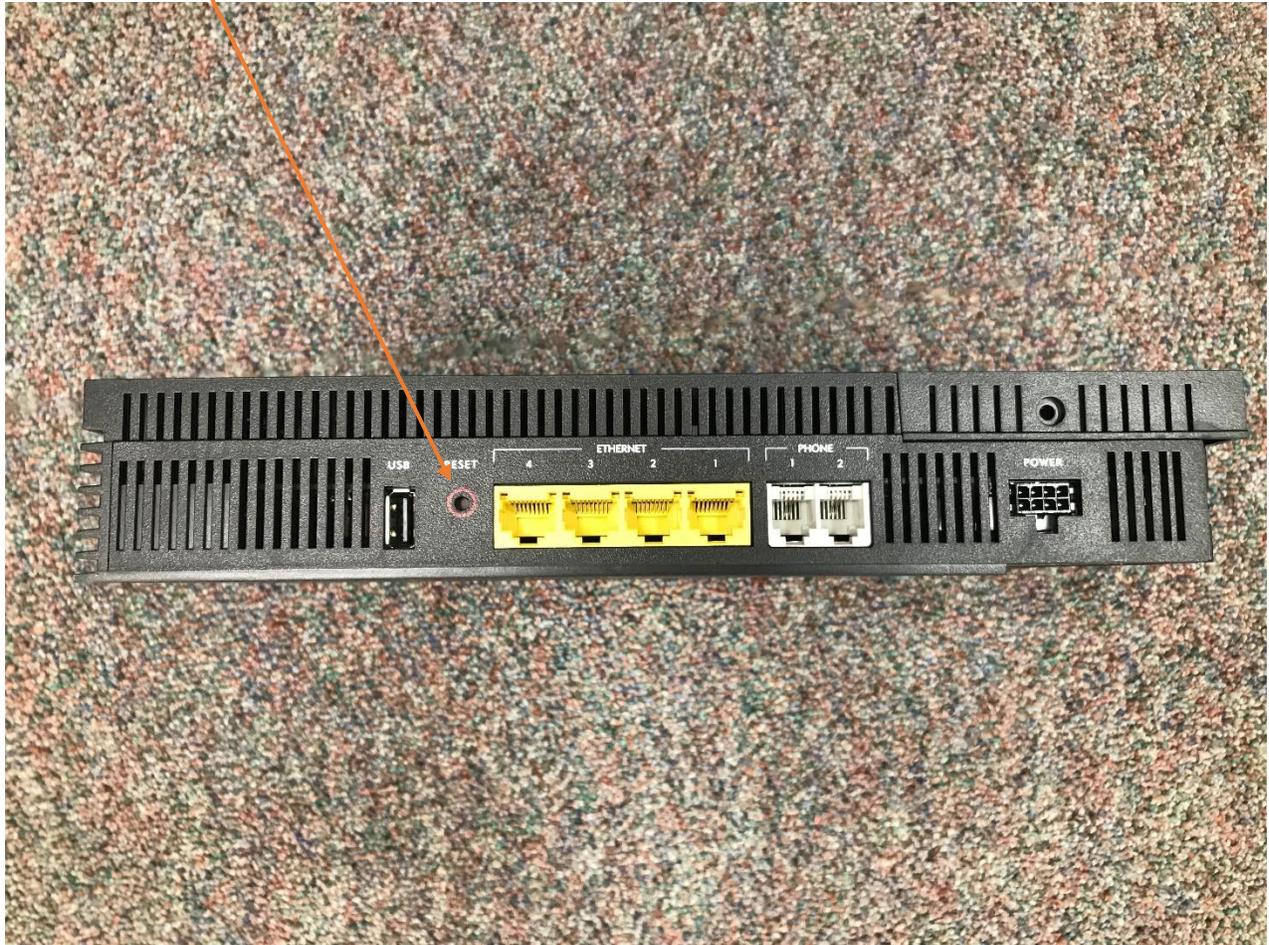
Uptime (how long they have been online for)

The Tx and Rx level dBm

From this info you can see whether the customer is online and what the Tx Rx levels are. Follow basic troubleshooting by having the customer reboot the router or by bypassing the router and hard wiring into the POE device.

When checking make sure the Tx is between +5 and -5 and the Rx is under -20 anything beyond -25 is usually trouble

If the troubleshooting fails to fix the issue have the customer press the reset button on the back of the device.



The Ubiquiti devices are different. Click on the link to the GPON you need to access and login



After logging in you will see the main page Click on ONU List to view customers

Hardware

Temperature

Board 1	33 C
Board 2	42 C
Board 3	33 C

Power Slot

PSU 1 Installed	yes
PSU 1 Type	AC
PSU 1 Powered	yes
PSU 2 Installed	yes
PSU 2 Type	AC
PSU 2 Powered	yes

Power

System voltage	25.00 V
System current	1.18 A
System power consumption	29.50 W

Fan

FAN 1	7190 RPM
FAN 2	6905 RPM
FAN 3	6375 RPM

Interfaces

Hide Distribution

Description	Interface	Type	IP Address	MTU	Tx	Rx	Status	Actions
Management	br0	bridge	10.2.8.9/24	1500	49.10 Kbps	1.46 Kbps	Connected	Actions
Alpine	pon1	pon			16.92 Mbps	448.73 Kbps	Connected	Actions
520 S. 850 E. Lehi	pon2	pon			11.75 Mbps	211.84 Kbps	Connected	Actions
313 S. 740 E. American Fork	pon3	pon			20.76 Mbps	915.29 Kbps	Connected	Actions
pon4	pon4	pon			384 bps	0 bps	Disconnected	Actions
pon5	pon5	pon			384 bps	0 bps	Disconnected	Actions
pon6	pon6	pon			384 bps	0 bps	Disconnected	Actions
pon7	pon7	pon			384 bps	0 bps	Disconnected	Actions
pon8	pon8	pon			384 bps	0 bps	Disconnected	Actions
sfp+1	sfp+1	nni			1.13 Mbps	35.59 Mbps	Connected	Actions
sfp+2	sfp+2	nni			0 bps	0 bps	Disconnected	Actions

Showing 1 to 11 of 11 entries

After clicking ONU list you will see customer info

Status	Serial Number	Name	Profile	PON	Model	Tx Power	Rx Power	Connection Time	WAN IP Address	LAN Ports
Connected	UBNT2073077b	Brad Rencher 650-814-1010	VLAN 1938 CGN 1 GIG	1	NanoG	1.67dBm	-15.69dBm	46d 1h 29m 11s		Green
Connected	UBNT207307d5	Alvin Stosich 801-664-3756	VLAN 1938 CGN 1 GIG	1	NanoG	2.12dBm	-14.71dBm	70d 4h 42m 29s		Green
Connected	UBNT20730898	David & Cindy Pierce 801-414-4770	VLAN 1938 CGN 1 GIG	1	NanoG	1.73dBm	-13.64dBm	5d 4h 24m 1s		Green
Connected	UBNT207308bb	David & Kimberly Hasleton 801-360-5280	VLAN 1938 CGN 1 GIG	1	NanoG	1.63dBm	-16.57dBm	70d 4h 42m 19s		Green
Connected	UBNT207308c0	Rick & Sanda Powell 801-319-7251	VLAN 1938 CGN 1 GIG	1	NanoG	2.10dBm	-15.07dBm	70d 4h 42m 28s		Green
Connected	UBNT207308cf	Spencer Collins 801-420-1350	VLAN 1938 CGN 1 GIG	1	NanoG	1.99dBm	-15.26dBm	70d 4h 42m 28s		Green
Connected	UBNT207308d4	David & Heather Eaton 801-623-1332	VLAN 1938 CGN 1 GIG	1	NanoG	1.38dBm	-15.65dBm	70d 4h 42m 19s		Green
Connected	UBNT207308de	Micheal Porter 801-492-0202	VLAN 1938 CGN 100 MEG	1	NanoG	1.65dBm	-14.46dBm	70d 4h 42m 29s		Green
Connected	UBNT20730910	Phil & Claire Kenny 801-414-4770	VLAN 1938 CGN 1 GIG	1	NanoG	2.05dBm	-14.17dBm	65d 3h 16m 5s		Green
Connected	UBNT20730d44	Alan Whitaker 801-230-3853	VLAN 1938 CGN 1 GIG	1	NanoG	2.00dBm	-15.54dBm	70d 4h 42m 29s		Green
Connected	UBNT207320da	Richard & Vickie Callister 801-369-6604	VLAN 1938 CGN 1 GIG	1	NanoG	2.10dBm	-15.51dBm	70d 4h 42m 29s		Green
Connected	UBNT207320e4	Griff & Susan Johnson 801-910-9341	VLAN 1938 CGN 1 GIG	1	NanoG	1.83dBm	-14.67dBm	42d 5h 49m 38s		Yellow
Connected	UBNT2073629d	Red Pine Construction Lehi	VLAN 32 STATIC 100 MEG	2	NanoG	2.16dBm	-17.77dBm	36d 21h 10m 14s		Green
Connected	UBNT20736356	FiveStrata American Fork Suite 2	VLAN 32 STATIC 100 MEG	3	NanoG	2.17dBm	-15.06dBm	32d 23h 41m 31s		Yellow
Connected	UBNT20781d06	Big Payout American Fork Suite 1	Big Payout VLAN 32 Static 500 Meg	3	NanoG	1.51dBm	-14.28dBm	32d 23h 41m 31s		Green
Connected	UBNT20781d3d	Keystone Construction Lehi	VLAN 32 STATIC 100 MEG	2	NanoG	1.87dBm	-21.08dBm	70d 4h 42m 29s		Green
Connected	UBNT20781d6a	Alan Paulson 801-473-4565	VLAN 1938 CGN 1 GIG	1	NanoG	2.15dBm	-14.72dBm	1d 17h 34m 9s		Green

Here you can see if the customer is Online

The Customer info

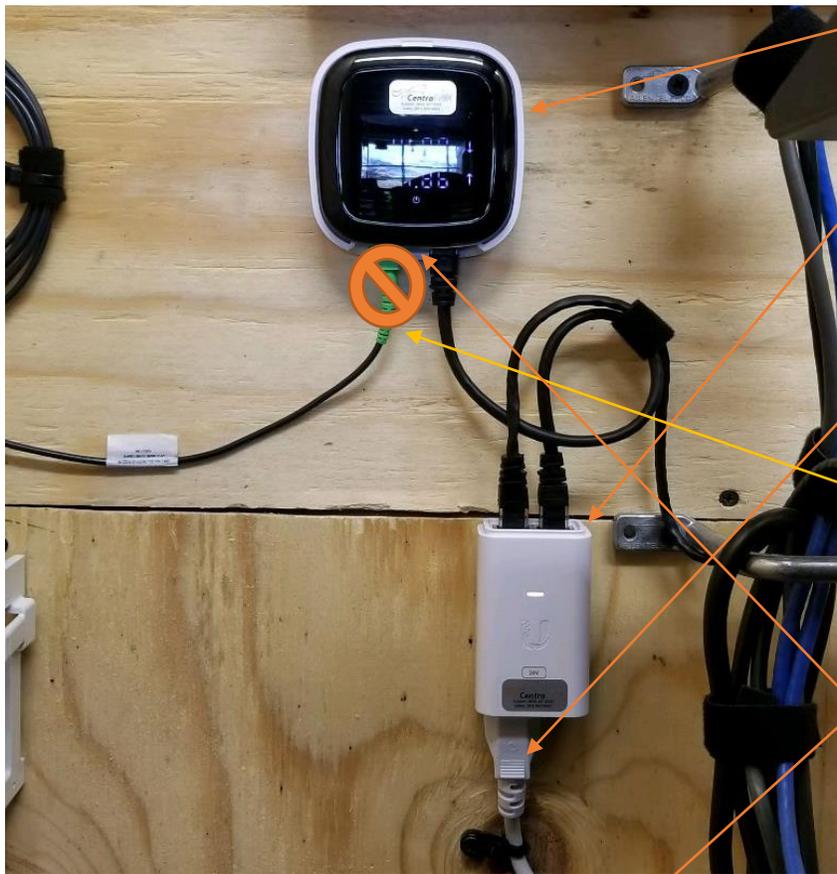
Tx and Rx Info

Device Uptime (how long online)

From this info you can see whether the customer is online and what the Tx Rx levels they should be as follows the Tx is between +5 and -5 and the Rx is under -20 anything beyond -25 is usually trouble

Follow basic troubleshooting by having the customer reboot the router or by bypassing the router and hard wiring into the POE device.

Most fiber to the home setups will look like this



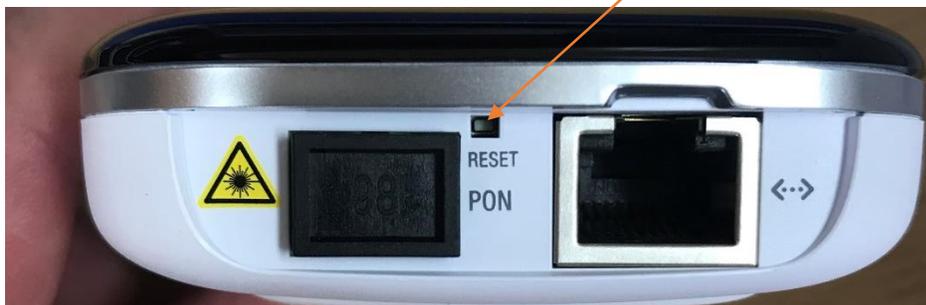
ONU device

POE Device

To reboot the POE hav customer unplug the POE here wait for 30 seconds then plug it back in.

**DO NOT** tell them to unplug the fiber line. They should not be touching this line

If these Fail they can reset the ONU device by pressing the reset button here



After troubleshooting if they are still having issues send a trouble over to dispatch as normal and they will send it to the tech. Make sure to include the GPON-ONU/ONT info like you would a DSL