

1. Summary of release

1.1. New features

1.1.1. New hardware version with Broadcom 63168 chipset (non-copper and copper versions)

- Single channel ADSL Annex A and Annex B, and VDSL up to 30a
- Dual channel (Bonded) support up to VDSL 17a, DSL Retransmission (RTX) and Vectoring
- This hardware version will replace the previous 6368 chipset bonded version that is in production

1.1.2. Software compatibility

- SW rev4.2.7 is compatible with the versions of SmartClass TPS that are currently in production
- See section 1.2 (Revision Info) for more information

1.1.3. StrataSync

- Multiple SW option deployment support via StrataSync

1.1.4. DSL Network Enhancements

- Ability to Start/Stop modem operation
- Elapsed time counters for Errors and Margin results
- NAT disable configuration for router modes
- Incremental mode enhancements (for Orange)

1.1.5. Copper Enhancements

- Adjusted Copper Resistance thresholds (max threshold changed from 10M-ohm to 100M-ohm)
- Included "Good Ground Check" test result in CableCheck reports (when enabled)

1.1.6. Saved Reports Enhancement

- Customer Specific Logo support in Saved Reports

1.2. Revision info

1.2.1. System SW Version

- 4.2.7
 - Software release is applicable to units with following B/N's:
 - CSC-TPSVW
 - CSC-TPSVW-CU
 - SCTPS-AB
 - SCTPS-AB-CU
 - SCTPS-BONDED
 - SCTPS-BONDED-CU
- * Units with B/N CSC-TPSV or CSC-TPSV-CU can't be upgraded with this SW Version***

1.2.2. Hardware Upgradeability

- Units with B/N CSC-TPSVW, SCTPS-AB or SCTPS-BONDED can't be upgraded to Copper/POTS

1.2.3. New Software Options

- No new SW options with this release

1.2.4. VDSL Broadcom Modem (Bonded) B/N: CSC-TPSVW and CSC-TPSVW-CU

- HW Type: BCM6368
- HW Rev: Rev. 1
- PHY1: A2pv6C038h.d24j1
- PHY1 SW: 4.12L.07.MP.08
- PHY2: A2pv4C037i.d24j1
- PHY2 SW: 4.12L.07.VB.08
- PHY3: A2pbC035i1.d24j1
- PHY3 SW: 4.12L.07.AB.08
- PHY4: B2pv6C035j.d24j1
- PHY4 SW: 4.12L.07.MPANXB.09

1.2.5. VDSL Broadcom Modem (Anx A/B, VDSL 30a) B/N: SCTPS-AB and SCTPS-AB-CU

- HW Type: BCM63168
- HW Rev: Rev. 1
- PHY1: A2pv6F039j.d24n
- PHY1 SW: 4.12L.07.MP.15
- PHY2: B2pv6F039g1.d24n
- PHY2 SW: 4.12L.07.MPANXB.15

**1.2.6. VDSL Broadcom Modem (VDSL 17a Bonded)
B/N: SCTPS-BONDED and SCTPS-BONDED-CU**

- HW Type: BCM63168
- HW Rev: Rev. 1
- PHY1: A2pv6F039o1.d26a
- PHY1 SW: 4.12L.07.MP.17
- PHY2: A2pvbF039o1.d26a
- PHY2 SW: 4.12L.07.BND.17

1.2.7. Copper Board Information:

- HW Rev: 1.0.0
- SW Rev: 1.03.02

1.2.8. SmartID Information:

- Firmware: AP 01 10 02
- Test Configuration: 1.2

1.2.9. Android Mobile Device Application Information

- Name: SC TPS
- Version: 3.4.7

2. Feature details (new)**2.1. New hardware version with Broadcom 63168 chipset (non-copper and copper versions)**

- Single channel ADSL Annex A and Annex B, and VDSL up to 30a
- Dual channel (Bonded) support up to VDSL 17a, Retransmission (RTX) and Vectoring
- B/N's for this hardware version are SCTPS-BONDED (non-copper) and SCTPS-BONDED-CU (copper)
- This hardware version will replace the previous 6368 chipset bonded version that is in production (CSC-TPSVW and CSC-TPSVW-CU)
*** Units with B/N CSC-TPSV or CSC-TPSV-CU can't be upgraded with this SW Version***

2.2. Software compatibility

- SW rev4.2.7 is compatible with the versions of SmartClass TPS that are currently in production as mentioned in above
- See section 1.2 (Revision Info) for more information

2.3. **StrataSync**

- Multiple SW option can now be deployed via StrataSync in during one instrument sync

2.4. **DSL Network Enhancements**

- Ability to Start/Stop modem operation
 - Modem Start/Stop function (using #1 on keypad while on DSL Summary result screen)
 - Note that this feature is available in both Single pair & Bonded. For Bonded, you can Start/Stop on the Group and Pair 1 & Pair 2 Summary screens
- Elapsed time counters for Errors and Margin results
- NAT-disable support (firewall filtering rules are disabled). This setting is present in the “LAN setup” for the following:
 - Modem-Router
 - Modem-Bridge / Ethernet-Router
- Incremental mode enhancements (for Orange)

2.5. **Copper Enhancements**

- Adjusted Copper Resistance thresholds (max threshold changed from 10M-ohm to 100M-ohm)
- Included “Good Ground Check” test result in CableCheck reports (when enabled)

2.6. **Saved Reports Enhancement**

- Customer Specific Logo support in Saved Reports
- Customers can save their logo as “company_logo.png” and upload to the SC-TPS in the root directory in File Manager/File Browser
- This will then be used in place of the JDSU logo in Saved Reports (i.e. the pdf and html)

3. **Open issues**

Please report any oddities observed in operation to your JDSU representative. Share your test experience: What happened? What test mode has been used? Type of testing?

3.1. **DSL**

3.1.1. **Data does not stay up when one pair loses sync (xDSL Bonded)**

- If the DSL modem is in sync on both lines in a bonded line configuration and then one of the lines loses sync, the SC-TPS loses data connectivity over the DSL interface.
- Data connectivity will reestablish once Showtime is reached

3.2. Network

3.2.1. Remote Operation for PPPoE

- Unit is unreachable through VNC while in PPPoE mode.

3.3. VoIP

3.3.1. H.323

- Under certain conditions H.323 (Full) might require to reboot the unit.
- Connect method might be displayed incorrectly as Full although the call has been configured to Fast.

3.3.2. SIP

- Codec on G.726 32 might be displayed as GSM-FR.

3.4. WiFi

3.4.1. No channel 12-14 support in WiFi AP mode

- When configuring the SmartClass TPS as a WiFi AP, there is no support for channels 12-14.

4. For your information

4.1. Configuration files on SmartClass TPS

4.1.1. Custom settings and saved config files

- Once upgraded to software version 4.0.9 (or later), any custom settings will be reverted to the default configs.
- Any previous saved config files from prior SW versions will not be compatible with this SW version and new config files will need to be setup and saved in order to be loaded onto your TPS instrument.

4.2. VNC Server on SmartClass TPS

4.2.1. Attempting Multiple VNC Connections to SmartClass TPS

- The VNC server on the SmartClass TPS can only support one client simultaneously, even if they are over different interfaces. For example, different VNC viewers through WiFi and Ethernet cannot work at the same time.

4.3. Remote Access

4.3.1. Conflicts between some tests and remote access

- Some test applications might conflict with the remote access which shares the same network interface. Refer to Table 7 (Remote access support) for information showing which tests and interfaces are supported with different remote access methods.

4.4. DSL

4.4.1. Incremental mode

- The detected DSL profile is remembered once the TRAINING state is reached for a particular connection and the Incremental mode is no longer active. This helps to prevent excessive sync times or scenarios where sync would not be able to be established.
- ***Use the Start/Stop modem function when trying to test multiple ports that are different DSL profiles (such as VDSL or ADSL, or PTM or ATM).***

4.5. Network

4.5.1. DHCP vendor IP and user class

- For IPoE over WAN interface DHCP Vendor ID and User Class available as setup into Bridge mode and VLAN enabled.

4.6. IP Video

4.6.1. Video totals

- The combined Average Video totals stream rate is not exactly the sum of adding the individual average stream rates. Reason for that is that the combined average rate starts counting once the first stream is established. If the second and/or third stream is activated quite some time later, that will impact the combined average stream rate.
- The combined Max Video totals stream rate is not the sum of adding the individual max stream rates. Reason for that is the different points in time for the individual streams to reach their max rate.

4.6.2. Multicast Video

- Under certain conditions it might be required to change the data mode setup after an initial DSL Synchronization in order to bring up Multicast Video Streaming. This will allow the Default Gateway and Routing Tables to initialize.

4.7. IP Data

4.7.1. IP Ping

- The SmartClass TPS Pingout time is 1second.

4.7.2. FTP/HTTP File Download

- If the FTP or HTTP Download test uses the option to save the downloaded file to an USB stick, don't remove the USB device before the download is completed. If this happens by accident, power cycle the unit.
- Make sure transfer protocol and port assigned does not mismatch. FTP normally uses port 21 and HTTP normally uses port 80. The SmartClass TPS uses these default values.

4.8. VoIP

4.8.1. VoIP Proxy registration

- On some occasions the unit is not able to use the automatic process to register with the Proxy server. If this happens, select the manual registration and the unit will become registered within a matter of seconds.

4.8.2. AutoAnswer Mode

- Using two SmartClass TPS units. One to establish the VoIP call, the other one is in Auto Answer Mode. Make sure the two units use a different MAC address.

4.9. System

4.9.1. Changing country codes and language settings

- Changing Country Code or a Language setting it might be advised to power cycle the unit.

4.9.2. File Browser "Send to Remote Server"

- Send to Remote Server is available for files, not for folders.