

QL TEDS Editor

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Overview



- Review of TEDS Editor Versions
- Review of Software Error Notices
- TEDS Editor Updates
- Review of Sensor TEDS Verification process



TEDS – Transducer Electronic Data Sheet

IEEE Standard - IEEE P1451.4/2.0

- All Sensors have a TEDS Chip
- TEDS Chip may contain all - none of the configuration data.
 - Sensor
 - Channel Name
 - Units
 - Description
 - Type
 - Range
 - Excitation
 - Sensitivity
 - Cal Date
 - Cal Due Date
 - Manufacturer
 - Model
 - TLTS Serial Number
 - M&TE Number



QL TEDS Editor Versions



-Version 2015.166

- June 2015
- Initial release

-Version 2015.321

- December 2015
- Make any field blank
- Automatic Read After Write



QL TEDS Editor Versions

–Version 2016.139 - No longer in use as of March 2017

–**Version 2017.207**

- September 2017
- Fixes and improvements to previous versions
- New fields (**compared to 2015.321**)
 - M&TE
 - Channel Name
 - Graph min, Graph max
 - “Last Programmed”



- **Error Notice 2016.166**

- Applies to Version 2015.166 – 2016.139

- Programming a calibration cycle longer than 4095 days (11+ years) will result in loss of data stored on the TEDS chip.

- Workaround

- Do not program a calibration cycle longer than 10 years
- Carefully enter the Cal Date and Cal Due Date to avoid programming an incorrect calibration cycle

- Notes

- TEDS Editor will automatically set the Cal Due date to 1 year after the Cal Date





- **Error Notice 2016.139**

- Applies to version 2016.139

- Programming the “Sensitivity” field can result in the loss information stored in the “Type” and “Range” fields.

- Workaround

- Discontinue use of TEDS Editor 2016.139. Revert to TEDS Editor 2015.321

TEDS Editor 2017 Updates



- **Fixes and improvements to previous versions**
 - Calibration cycle is now limited to 11 years
 - Fixes to handle relocation of Serial Number and M&TE Number
- **GUI Changes**
 - Program Version in title bar
 - Read-only fields displayed in gray
- **Windows 10 support**
- **Enforce read before write and read before print**



TEDS Editor 2017 Updates



- **Implemented in QUIKLOOK 2017**
 - M&TE Number
 - Channel Name
- **QUIKLOOK 2018**
 - Graph Min, Graph Max



- **New field - “Last Programmed”**

- Stores timestamp and program version used to write TEDS chip

8-16-2017 11:30 AM Version 2017.207

- Displayed as “N/A” if Last Programmed field is not populated
 - 1kb TEDS chips (limited space)
 - Some cables equipped with TEDS
 - Sensors programmed with older version of TEDS Editor

TEDS Editor 2017 Updates



The screenshot shows the QL TEDS Editor 2017.207 software interface. The title bar reads "QL TEDS Editor 2017.207". The menu bar includes "Refresh", "Print", "Quit", and "Help". The main interface is divided into several sections:

- Buttons:** "Read TEDS" and "Write TEDS".
- Sensor Settings:** "Sensor" (200A Current), "Channel Name" (empty), "Units" (Amps), "Description" (200A Current), "Type" (Differential), "Range" (+-1 Vdc), "Excitation" (N/A), "Sensitivity" (200.00 (Amps)/V), "Cal Date" (8/7/2017), and "Cal Due Date" (8/7/2018).
- Manufacturer/Model/Serial Number:** "Manufacturer" (Teledyne Lecroy Test Services), "Model" (160206), and "Serial Number" (SN123).
- M&TE Number:** "M&TE Number" (MTE456).
- One Wire Adapter Connection Status:** "Adapter Name" ((DS9490) USB1), "One Wire Chip Serial Number" (7A0000022D762123), and "One Wire Chip Name" (DS2433).
- Status:** A log of events: "8/7/2017 11:39:04 AM: One Wire Chip 7A0000022D762123 detected.", "8/7/2017 11:39:06 AM: One Wire Chip 7A0000022D762123 detected.", "8/7/2017 11:39:06 AM: Read TEDS data started.", and "8/7/2017 11:39:10 AM: Read TEDS data completed."
- Graph Settings:** "Define Graph Maximum" and "Define Graph Minimum" (both empty).
- Last Programmed:** "Last Programmed" (8-7-2017 11:37 AM Version 2017.207).

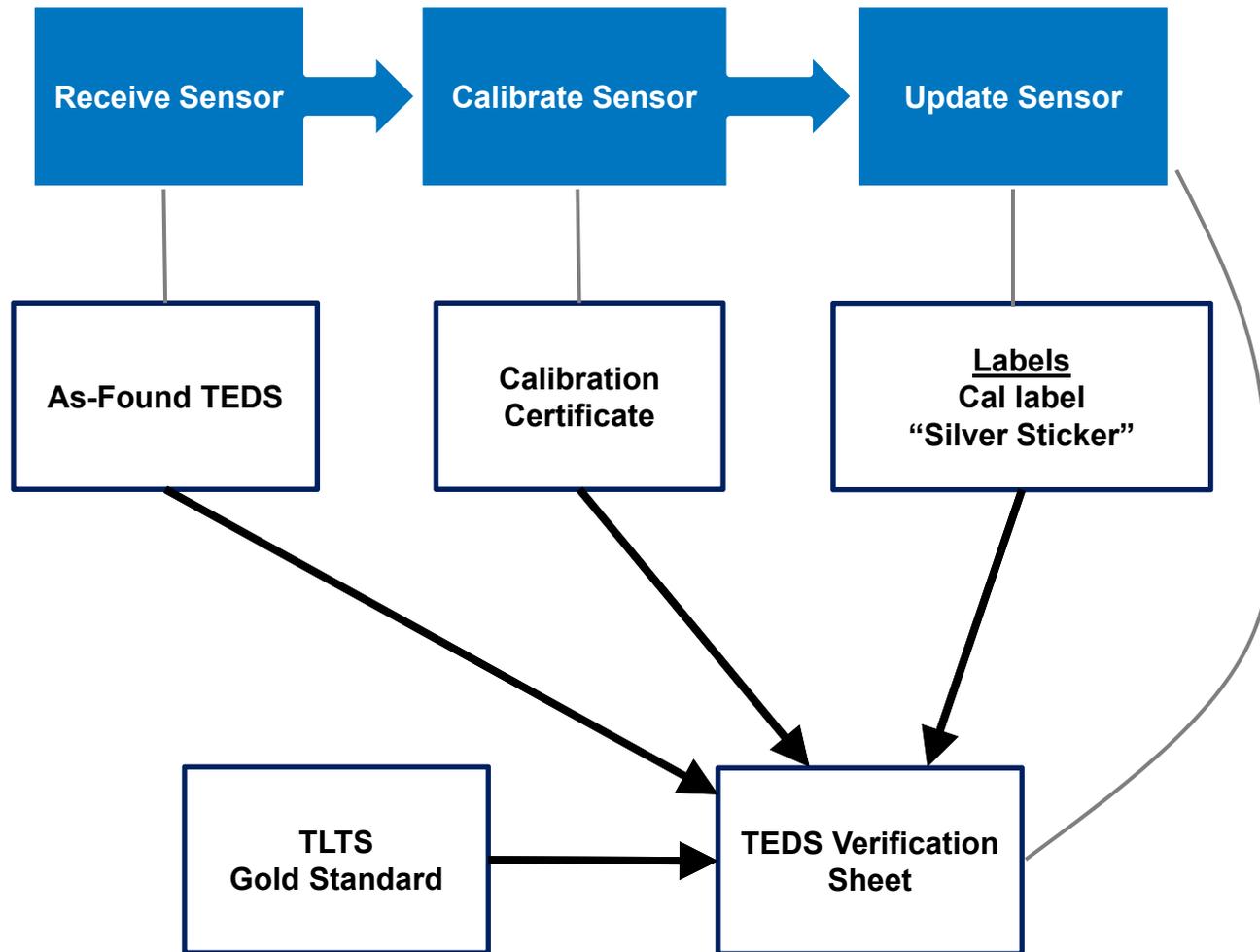
Red arrows point to the following fields: the title bar, Channel Name, M&TE Number, Define Graph Maximum, Define Graph Minimum, and Last Programmed.



Sensor TEDS Verification Process

- TLTS uses the Sensor TEDS Verification sheet to cross check the data on the TEDS chip with the calibration certificate, sensor labels, etc.
- The same process should be applied any time a sensor is programmed
- Current TEDS Editor SR Program with SR verification process
- Next version to be commercial with SR verification process

Sensor TEDS Verification Procedure



Any Questions?

THANK YOU



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