



Certificate of Calibration Fluke Nederland B.V.

Certificate Number:	SA00877068	Date of Calibration:	05 Aug 2020
Receive Condition:	IN TOLERANCE	Date of Recalibration:	05 Aug 2021
Return Condition:	IN TOLERANCE	Place of Calibration:	Son en Breugel
Manufacturer:	FLUKE NETWORKS	Temperature within:	(23.0 ± 3) °C
Model:	DSX-600	Humidity within:	(45 ± 20) %rh
Serial Number:	18050177-18090063		
Description:	500 MHZ CABLEANALYZER MAINUNIT AND REMOTE		
Procedure:	Manual Procedure		
Procedure:	Manual Procedure		
Procedure:	Manual Procedure		
Procedure: Customer:	Manual Procedure EQUICOM 1162 BUDAPEST		
Procedure: Customer: Customer Asset ID:	Manual Procedure EQUICOM 1162 BUDAPEST -		
Procedure: Customer: Customer Asset ID: RMA Number:	Manual Procedure EQUICOM 1162 BUDAPEST - 606241145		

All measurements are traceable to national and/or international standards or have been derived by approved ratio techniques. When possible standards used for this calibration are ISO/IEC 17025 accredited calibrated.

This calibration is performed by a DEKRA certified lab for ISO 9001. This certificate may not be reproduced other than in full. Calibration certificates without signatures, either electronic or handwritten, are not valid.



Issue Date: 05 Aug 2020

Electronically signed

Authorized By

R. Kalidien

Fluke Nederland B.V.

E-mail

service.nl@fluke.com





Certificate of Calibration

Certificate Number: SA00877068

Date of Calibration: 05 Aug 2020

Remarks

- The calibration status found in this certificate on the top of each results page must be interpreted as:

As-Found	: Data collected before the unit was adjusted and / or repaired
As-Left	: Data collected after the unit has been adjusted and / or repaired
Found-Left	: Data collected without any adjustment and / or repair performed

- The calibration interval (due date) is the responsibility of the end user.
- According to the European norm 'Operation of electrical installations' NEN-EN 50110-1 release 2013 and the Dutch norm NEN 3140 release 2015 paragraph 5.102.12 through 5.102.16, a safety test is not required. Therefore not performed.
- Temperature conversions (if applicable) are performed according to ISO/IEC 60584:2013 for thermocouples, and ISO/IEC 60751:2008 for resistance temperature devices.

Standards and test-equipment used

Model	Serial No	Inventory No	Due to	Certificate No
DSX-CALVERST	E000005	WP2060	20 Nov 2020	EVL545302



Found-Left Report



0.5 0 0 0 100 200 300 400 Frequency (MHz)

Pass Worst margin: 0.520 at 34.75 MHz in pair 36-45. Worst accuracy at each frequency shown.

CDNEXT

CDNEXT Artifact SN 2843471



Pass Worst margin: 0.470 at 30.88 MHz in pair 45-78. Worst accuracy at each frequency shown.

CMRL



Pass Worst margin: 1.190 at 1 MHz in pair 78. Worst accuracy at each frequency shown.

Measured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.



0 0 DSX Cable Analyzer

Found-Left Report



200

Frequency (MHz)

300

400

Pass Worst margin: 0.790 at 350 MHz in pair 45. Worst accuracy at each frequency shown.

100

TCL







Pass Worst margin: 0.670 at 1.88 MHz in pair 12. Worst accuracy at each frequency shown.

Measured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.



Found-Left Report



0.5 0.0 0 100 200 300 400 500 Frequency (MHz)

Pass Worst margin: 0.370 at 75.25 MHz in pair 12-36. Worst accuracy at each frequency shown.

Beasured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.

Corresponding measurement accuracy requirement for nominally compliant Level IV or Level 2G/VI field tester.

Loop Resistance

oop Resistance		Loop Resistance A	sistance Artifact SN	
	Measured	Expected	Limit	
Resistance on pair 12	0.19	0.00	0.80	Pass
Resistance on pair 36	50.02	49.80	0.60	Pass
Resistance on pair 45	99.97	99.80	1.60	Pass
Resistance on pair 78	454.71	453.00	4.00	Pass

Resistance imbalance	Resistance Unbalance Artifact SN			2860565
	Measured	Expected	Limit	
Resistance on pair 12	0.16	0.00	0.80	Pass
Resistance on pair 36	25.06	24.90	0.90	Pass
Resistance on pair 45	12.33	12.13	0.90	Pass
Resistance on pair 78	24.24	24.05	0.90	Pass
Resistance imbalance on pair 12	0.01	0.00	0.05	Pass
Resistance imbalance on pair 36	0.01	0.00	0.13	Pass
Resistance imbalance on pair 45	0.33	0.32	0.06	Pass
Resistance imbalance on pair 78	0.84	0.85	0.12	Pass

DSX-8000 only: M_IL and M_FEXT measurements validate the ability of the DSX-8000 to make measurements with DSX-5000 adapters.

MIL Not applicable

M FEXT Not applicable

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Found-Left Report





Pass Worst margin: 0.510 at 35 MHz in pair 36-12. Worst accuracy at each frequency shown.

CDNEXT

CDNEXT Artifact SN 2843471



Pass Worst margin: 0.520 at 31.25 MHz in pair 45-78. Worst accuracy at each frequency shown.

CMRL



Pass Worst margin: 1.240 at 327 MHz in pair 78. Worst accuracy at each frequency shown.

Measured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.



0.5

DSX Cable Analyzer

Found-Left Report



200

300

400

Frequency (MHz)
Pass Worst margin: 0.850 at 349 MHz in pair 78. Worst accuracy at each frequency shown.

100



TCL Artifact SN 2843444 1.4 1.2 1.0 0.8 (dB) 0.6 0.4 0.2 0.0 100 200 400 0 300 Frequency (MHz)



IL **ILFEXT Artifact SN** 2860551 2.5 2.0 1.5 କ୍ସି ୩୦ 1.0 0.5 0.0 200 300 500 0 100 400 Frequency (MHz)



Measured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.



Found-Left Report



0.5 0.0 0 100 200 300 400 500 Frequency (MHz)

Pass Worst margin: 0.390 at 37.25 MHz in pair 45-78. Worst accuracy at each frequency shown.

Beasured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.

Corresponding measurement accuracy requirement for nominally compliant Level IV or Level 2G/VI field tester.

Loop Resistance

.oop Resistance	Loop Resistance Artifact SN			2860532
	Measured	Expected	Limit	
Resistance on pair 12	0.26	0.00	0.80	Pass
Resistance on pair 36	50.13	49.80	0.60	Pass
Resistance on pair 45	100.35	99.80	1.60	Pass
Resistance on pair 78	453.23	453.00	4.00	Pass

Resistance imbalance	Resistance Unbalance Artifact SN			2860565
	Measured	Expected	Limit	
Resistance on pair 12	0.33	0.00	0.80	Pass
Resistance on pair 36	25.18	24.90	0.90	Pass
Resistance on pair 45	12.43	12.13	0.90	Pass
Resistance on pair 78	24.21	24.05	0.90	Pass
Resistance imbalance on pair 12	0.02	0.00	0.05	Pass
Resistance imbalance on pair 36	0.01	0.00	0.13	Pass
Resistance imbalance on pair 45	0.33	0.32	0.06	Pass
Resistance imbalance on pair 78	0.82	0.85	0.12	Pass

DSX-8000 only: M_IL and M_FEXT measurements validate the ability of the DSX-8000 to make measurements with DSX-5000 adapters.

MIL Not applicable

M FEXT Not applicable

Test Program TFSTest v2.5.7025 DSX Report Form v3.05 18-May-2017