DEWETRON GmbH

Parkring 4
8074 Grambach
Austria

AAT2540652
Akkreditierung Austria 0632
29.10.2025

Kalibrierstelle für elektrische Messgrößen
Calibration body for electrical measurands

akkreditiert durch / *accredited by*
AKKREDITIERUNG AUSTRIA

Kalibrierzeichen
Calibration Mark

Kalibrierschein nach ISO/IEC 17025
Calibration certificate according to ISO/IEC 17025

Gegenstand *Object*	8 channel data acquisition system
Hersteller *Manufacturer*	DEWETRON
Typ *Type*	NEXDAQ
Herstellernummer *Serial number*	CE240372
Auftraggeber *Customer*	
Kalibriernummer *Order number*	AAT2540652
Anzahl der Seiten des Kalibrierscheines *Number of pages of the certificate*	10
Datum der Kalibrierung *Date of calibration*	29.10.2025

Dieser Kalibrierschein dokumentiert die Rückführbarkeit auf nationale Normale zur Darstellung der physikalischen Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI).

Akkreditierung Austria ist Unterzeichner der multilateralen Übereinkommen der European Co-operation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine.

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements according to the International system of Units (SI).

Akkreditierung Austria is a signatory to the multilateral agreements of the European Co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates.

Stempel *Seal*	Datum *Date*	Zeichnungsberechtigter *Authorised person*	Bearbeiter *Person responsible*
	29.10.2025	Stefan Strohmaier	Nandor Nagy

1. Kalibriergegenstand / *Calibration object*

8 channel data acquisition system DEWETRON NEXDAQ, S/N: CE240372

2. Kalibrierverfahren / *Calibration procedure*

Die Kalibrierung erfolgt durch Vergleich der durch die Kalibrierstelle / Normale dargestellten Werte mit den Ausgangsgrößen am Kalibriergegenstand beziehungsweise den am Kalibriergegenstand angezeigten Werten.
The calibration is made by comparing the readings from the laboratory / standards to the output of the calibration object respectively the values displayed on the calibration object.

Prüfroutine / *Calibration procedure*: NEXDAQ_Akkred, Rev. 2.00

3. Messergebnisse / *Measurement results*

Die Kalibrierung im Rahmen der Akkreditierung umfasst die Messgrößen Gleichspannung, Wechselspannung, Gleichstrom, Wechselstrom und Gleichstromwiderstand.
Die Messergebnisse beziehen sich ausschließlich auf diesen Kalibriergegenstand zum Zeitpunkt der Kalibrierung.
The calibration scope of the accreditation contains the quantities direct voltage, alternating voltage, direct current, alternating current and direct current resistance.
The measurement results are exclusively linked to this calibration object at the time of calibration.

4. Messunsicherheit / *Measurement uncertainty*

Angegeben ist die erweiterte Messunsicherheit, die sich aus der Standardmessunsicherheit durch Multiplikation mit dem Erweiterungsfaktor k=2 ergibt. Sie wurde gemäß EA-4/02 ermittelt. Der Wert der Messgröße liegt im Regelfall mit einer Wahrscheinlichkeit von annähernd 95% im zugeordneten Werteintervall.
Ein Anteil für die Langzeitstabilität des Kalibriergegenstandes ist nicht enthalten.
The stated extended measurement uncertainty is derived from the standard uncertainty of measurement multiplied by the coverage factor k=2. It has been determined according to EA-4/02. The measured quantity is inside the corresponding value interval with a probability of approximately 95%.
A factor for the long time stability of the calibration object is not taken into account.

5. Umgebungsbedingungen / *environmental conditions*

Temperatur / *Temperature:*	24,3 °C
Rel. Luftfeuchte / *Rel. humidity:*	40,0 % r.H.
Kalibrierort / *Place of calibration:*	DEWETRON GmbH, Parkring 4, 8074 Grambach, Austria

6. Auftragnummer / *Reference Number*

7. Status / *Status*

PASS ()

AS-FOUND:	Eingangskalibration / *Incoming calibration*
AS-LEFT:	Ausgangskalibration / *Outgoing calibration*
FOUND/LEFT:	Eingangskalibration erfüllt Herstellerspezifikation / *Incoming calibration according to manufacturer specifications*
PASS:	Messergebnis liegt innerhalb der Herstellerspezifikationen (ohne Berücksichtigung der Messunsicherheiten) / *Measurement result is within manufacturer's specifications (without taking into account the measurement uncertainties)*
FAIL:	Das Messergebnis liegt nicht innerhalb der Herstellerspezifikationen (ohne Berücksichtigung der Messunsicherheiten) / *Measurement result is out of manufacturer's specifications (without taking into account the measurement uncertainties)*

8. Verwendete Fußnoten / *Used foot notes:*

(1) Zusätzliche Messwerte außerhalb des akkreditierten Bereiches, es kann keine Konformitätsaussage getroffen werden.
(1) Additional measured values outside the accreditited scope, a conformity statement cannot be made.

9. Kommentare / *Comments*

test

Für die Festlegung und Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.
The user is responsible for the definition and the compliance to a resonable period for repeating the calibration.

10. Verwendete Normale / Standards used

Asset	Description	Serial Number	Certificate No.	Cal Date	Due Date
5522A 01	5522A CALIBRATOR	3904901	81072025	10-Jul-2025	9-Jul-2026
Keysight 3458A 03	3458A Multimeter	MY45052880	60092025	15-Sep-2025	15-Sep-2026

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status
Current Temperature of DMM and Calibrator								
DMM:	40.2°C							
Calibrator:	26.52°C							
Kalibrierverfahren / calibration method:								
CAL-KV-01_Gleichspannung_v1.0_2024-07-04.xlsx-02								
CAL-KV-01_Gleichspannung_v1.0_2024-07-04.xlsx-05								
CAL-KV-02_Wechselspannung_v1.0_2024-07-04.xlsx-02C								
TRION version:	7.6.2.7554							
NEXDAQ type:	NEXDAQ-1000							
NEXDAQ base version:	00100							
NEXDAQ serial number:	CE240372							
NEXDAQ firmware:	54							
Digital IO Test								
Digital IO							Pass	(1)
LED Check								
LED							Pass	(1)
CAN Interface Test								
CAN Interface							Pass	(1)
Counter Test								
Counter							Pass	(1)
DC Voltage Calibration								
DC Accuracy:								
0.05% of reading +/-0.02% of Range +/-50uV								
100mV Range 1MSamples/sec								
-0.090000 V @ CH1	-0.090000 V	-0.090003 V	-0.090115 V	-0.089885 V	4.10 e-06 V	-0,000003 V	2.9%	Pass
-0.090000 V @ CH2	-0.090000 V	-0.090003 V	-0.090115 V	-0.089885 V	4.10 e-06 V	-0,000003 V	2.7%	Pass
-0.090000 V @ CH3	-0.090000 V	-0.090000 V	-0.090115 V	-0.089885 V	4.10 e-06 V	0,000000 V	0.174%	Pass
-0.090000 V @ CH4	-0.090000 V	-0.089996 V	-0.090115 V	-0.089885 V	4.10 e-06 V	0,000004 V	3.25%	Pass
-0.090000 V @ CH5	-0.090000 V	-0.090004 V	-0.090115 V	-0.089885 V	4.10 e-06 V	-0,000004 V	3.16%	Pass
-0.090000 V @ CH6	-0.090000 V	-0.089999 V	-0.090115 V	-0.089885 V	4.10 e-06 V	0,000001 V	0.696%	Pass
-0.090000 V @ CH7	-0.090000 V	-0.089997 V	-0.090115 V	-0.089885 V	4.10 e-06 V	0,000003 V	2.58%	Pass
-0.090000 V @ CH8	-0.090000 V	-0.090000 V	-0.090115 V	-0.089885 V	4.10 e-06 V	0,000000 V	0.232%	Pass
0.000000 V @ CH1	0.000000 V	-0.000001 V	-0.000070 V	0.000070 V	3.40 e-06 V	-0,000001 V	1.56%	Pass
0.000000 V @ CH2	0.000000 V	-0.000001 V	-0.000070 V	0.000070 V	3.40 e-06 V	-0,000001 V	1.82%	Pass
0.000000 V @ CH3	0.000000 V	0.000003 V	-0.000070 V	0.000070 V	3.40 e-06 V	0,000003 V	4.25%	Pass
0.000000 V @ CH4	0.000000 V	0.000002 V	-0.000070 V	0.000070 V	3.40 e-06 V	0,000002 V	2.97%	Pass
0.000000 V @ CH5	0.000000 V	-0.000001 V	-0.000070 V	0.000070 V	3.40 e-06 V	-0,000001 V	2.01%	Pass
0.000000 V @ CH6	0.000000 V	0.000002 V	-0.000070 V	0.000070 V	3.40 e-06 V	0,000002 V	2.82%	Pass
0.000000 V @ CH7	0.000000 V	-0.000000 V	-0.000070 V	0.000070 V	3.40 e-06 V	0,000000 V	0.412%	Pass
0.000000 V @ CH8	0.000000 V	0.000000 V	-0.000070 V	0.000070 V	3.40 e-06 V	0,000000 V	0.297%	Pass
0.090000 V @ CH1	0.090000 V	0.090000 V	0.089885 V	0.090115 V	4.10 e-06 V	0,000000 V	0.058%	Pass
0.090000 V @ CH2	0.090000 V	0.090000 V	0.089885 V	0.090115 V	4.10 e-06 V	0,000000 V	0.116%	Pass
0.090000 V @ CH3	0.090000 V	0.090004 V	0.089885 V	0.090115 V	4.10 e-06 V	0,000004 V	3.51%	Pass
0.090000 V @ CH4	0.090000 V	0.090004 V	0.089885 V	0.090115 V	4.10 e-06 V	0,000004 V	3.07%	Pass
0.090000 V @ CH5	0.090000 V	0.089999 V	0.089885 V	0.090115 V	4.10 e-06 V	-0,000001 V	0.435%	Pass
0.090000 V @ CH6	0.090000 V	0.090002 V	0.089885 V	0.090115 V	4.10 e-06 V	0,000002 V	1.8%	Pass
0.090000 V @ CH7	0.090000 V	0.090000 V	0.089885 V	0.090115 V	4.10 e-06 V	0,000000 V	0.406%	Pass
0.090000 V @ CH8	0.090000 V	0.090004 V	0.089885 V	0.090115 V	4.10 e-06 V	0,000004 V	3.16%	Pass
1V Range 1MSamples/sec								
-0.900000 V @ CH1	-0.900000 V	-0.900013 V	-0.900700 V	-0.899300 V	15.00 e-06 V	-0,000013 V	1.81%	Pass
-0.900000 V @ CH2	-0.900000 V	-0.900002 V	-0.900700 V	-0.899300 V	15.00 e-06 V	-0,000002 V	0.238%	Pass
-0.900000 V @ CH3	-0.900000 V	-0.900015 V	-0.900700 V	-0.899300 V	15.00 e-06 V	-0,000015 V	2.1%	Pass
-0.900000 V @ CH4	-0.900000 V	-0.900008 V	-0.900700 V	-0.899300 V	15.00 e-06 V	-0,000008 V	1.19%	Pass
-0.900000 V @ CH5	-0.900000 V	-0.900010 V	-0.900700 V	-0.899300 V	15.00 e-06 V	-0,000010 V	1.38%	Pass
-0.900000 V @ CH6	-0.900000 V	-0.900011 V	-0.900700 V	-0.899300 V	15.00 e-06 V	-0,000011 V	1.57%	Pass
-0.900000 V @ CH7	-0.900000 V	-0.900009 V	-0.900700 V	-0.899300 V	15.00 e-06 V	-0,000009 V	1.29%	Pass
-0.900000 V @ CH8	-0.900000 V	-0.899995 V	-0.900700 V	-0.899300 V	15.00 e-06 V	0,000005 V	0.667%	Pass
0.000000 V @ CH1	0.000000 V	0.000002 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000002 V	0.677%	Pass
0.000000 V @ CH2	0.000000 V	0.000003 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000003 V	1.03%	Pass
0.000000 V @ CH3	0.000000 V	0.000006 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000006 V	2.27%	Pass
0.000000 V @ CH4	0.000000 V	0.000003 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000003 V	1.24%	Pass
0.000000 V @ CH5	0.000000 V	0.000002 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000002 V	0.79%	Pass
0.000000 V @ CH6	0.000000 V	0.000000 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000000 V	0.0942%	Pass
0.000000 V @ CH7	0.000000 V	0.000003 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000003 V	1.33%	Pass
0.000000 V @ CH8	0.000000 V	0.000005 V	-0.000250 V	0.000250 V	3.40 e-06 V	0,000005 V	1.85%	Pass
0.900000 V @ CH1	0.900000 V	0.900015 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000015 V	2.19%	Pass

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status
0.900000 V @ CH2	0.900000 V	0.900011 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000011 V	1.52%	Pass
0.900000 V @ CH3	0.900000 V	0.900020 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000020 V	2.81%	Pass
0.900000 V @ CH4	0.900000 V	0.900013 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000013 V	1.9%	Pass
0.900000 V @ CH5	0.900000 V	0.900016 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000016 V	2.29%	Pass
0.900000 V @ CH6	0.900000 V	0.900012 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000012 V	1.67%	Pass
0.900000 V @ CH7	0.900000 V	0.900021 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000021 V	3%	Pass
0.900000 V @ CH8	0.900000 V	0.900017 V	0.899300 V	0.900700 V	15.00 e-06 V	0,000017 V	2.48%	Pass
3V Range 1MSamples/sec								
-2.800000 V @ CH1	-2.800000 V	-2.800040 V	-2.802050 V	-2.797950 V	42.00 e-06 V	-0,000040 V	1.95%	Pass
-2.800000 V @ CH2	-2.800000 V	-2.800040 V	-2.802050 V	-2.797950 V	42.00 e-06 V	-0,000040 V	1.95%	Pass
-2.800000 V @ CH3	-2.800000 V	-2.800040 V	-2.802050 V	-2.797950 V	42.00 e-06 V	-0,000040 V	1.95%	Pass
-2.800000 V @ CH4	-2.800000 V	-2.800040 V	-2.802050 V	-2.797950 V	42.00 e-06 V	-0,000040 V	1.95%	Pass
-2.800000 V @ CH5	-2.800000 V	-2.800010 V	-2.802050 V	-2.797950 V	42.00 e-06 V	-0,000010 V	0.488%	Pass
-2.800000 V @ CH6	-2.800000 V	-2.800040 V	-2.802050 V	-2.797950 V	42.00 e-06 V	-0,000040 V	1.95%	Pass
-2.800000 V @ CH7	-2.800000 V	-2.800020 V	-2.802050 V	-2.797950 V	42.00 e-06 V	-0,000020 V	0.976%	Pass
-2.800000 V @ CH8	-2.800000 V	-2.799980 V	-2.802050 V	-2.797950 V	42.00 e-06 V	0,000020 V	0.976%	Pass
0.000000 V @ CH1	0.000000 V	0.000008 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000008 V	1.24%	Pass
0.000000 V @ CH2	0.000000 V	0.000008 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000008 V	1.29%	Pass
0.000000 V @ CH3	0.000000 V	0.000010 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000010 V	1.57%	Pass
0.000000 V @ CH4	0.000000 V	0.000005 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000005 V	0.758%	Pass
0.000000 V @ CH5	0.000000 V	0.000005 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000005 V	0.818%	Pass
0.000000 V @ CH6	0.000000 V	0.000003 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000003 V	0.408%	Pass
0.000000 V @ CH7	0.000000 V	0.000008 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000008 V	1.18%	Pass
0.000000 V @ CH8	0.000000 V	0.000009 V	-0.000650 V	0.000650 V	3.40 e-06 V	0,000009 V	1.32%	Pass
2.800000 V @ CH1	2.800000 V	2.800060 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000060 V	2.93%	Pass
2.800000 V @ CH2	2.800000 V	2.800067 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000067 V	3.25%	Pass
2.800000 V @ CH3	2.800000 V	2.800043 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000043 V	2.11%	Pass
2.800000 V @ CH4	2.800000 V	2.800047 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000047 V	2.28%	Pass
2.800000 V @ CH5	2.800000 V	2.800030 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000030 V	1.46%	Pass
2.800000 V @ CH6	2.800000 V	2.800043 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000043 V	2.11%	Pass
2.800000 V @ CH7	2.800000 V	2.800050 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000050 V	2.44%	Pass
2.800000 V @ CH8	2.800000 V	2.800040 V	2.797950 V	2.802050 V	42.00 e-06 V	0,000040 V	1.95%	Pass
10V Range 1MSamples/sec								
-9.000000 V @ CH1	-9.000000 V	-9.000097 V	-9.006550 V	-8.993450 V	170.00 e-06 V	-0,000097 V	1.48%	Pass
-9.000000 V @ CH2	-9.000000 V	-9.000060 V	-9.006550 V	-8.993450 V	170.00 e-06 V	-0,000060 V	0.916%	Pass
-9.000000 V @ CH3	-9.000000 V	-9.000073 V	-9.006550 V	-8.993450 V	170.00 e-06 V	-0,000073 V	1.12%	Pass
-9.000000 V @ CH4	-9.000000 V	-9.000087 V	-9.006550 V	-8.993450 V	170.00 e-06 V	-0,000087 V	1.32%	Pass
-9.000000 V @ CH5	-9.000000 V	-9.000023 V	-9.006550 V	-8.993450 V	170.00 e-06 V	-0,000023 V	0.356%	Pass
-9.000000 V @ CH6	-9.000000 V	-9.000033 V	-9.006550 V	-8.993450 V	170.00 e-06 V	-0,000033 V	0.509%	Pass
-9.000000 V @ CH7	-9.000000 V	-9.000090 V	-9.006550 V	-8.993450 V	170.00 e-06 V	-0,000090 V	1.37%	Pass
-9.000000 V @ CH8	-9.000000 V	-8.999953 V	-9.006550 V	-8.993450 V	170.00 e-06 V	0,000047 V	0.712%	Pass
-5.000000 V @ CH1	-5.000000 V	-5.000033 V	-5.004550 V	-4.995450 V	110.00 e-06 V	-0,000033 V	0.733%	Pass
-5.000000 V @ CH2	-5.000000 V	-4.999997 V	-5.004550 V	-4.995450 V	110.00 e-06 V	0,000003 V	0.0733%	Pass
-5.000000 V @ CH3	-5.000000 V	-5.000003 V	-5.004550 V	-4.995450 V	110.00 e-06 V	-0,000003 V	0.0733%	Pass
-5.000000 V @ CH4	-5.000000 V	-5.000027 V	-5.004550 V	-4.995450 V	110.00 e-06 V	-0,000027 V	0.586%	Pass
-5.000000 V @ CH5	-5.000000 V	-4.999997 V	-5.004550 V	-4.995450 V	110.00 e-06 V	0,000003 V	0.0733%	Pass
-5.000000 V @ CH6	-5.000000 V	-4.999997 V	-5.004550 V	-4.995450 V	110.00 e-06 V	0,000003 V	0.0733%	Pass
-5.000000 V @ CH7	-5.000000 V	-5.000023 V	-5.004550 V	-4.995450 V	110.00 e-06 V	-0,000023 V	0.513%	Pass
-5.000000 V @ CH8	-5.000000 V	-4.999930 V	-5.004550 V	-4.995450 V	110.00 e-06 V	0,000070 V	1.54%	Pass
0.000000 V @ CH1	0.000000 V	0.000022 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000022 V	1.08%	Pass
0.000000 V @ CH2	0.000000 V	0.000024 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000024 V	1.17%	Pass
0.000000 V @ CH3	0.000000 V	0.000032 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000032 V	1.55%	Pass
0.000000 V @ CH4	0.000000 V	0.000011 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000011 V	0.527%	Pass
0.000000 V @ CH5	0.000000 V	0.000013 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000013 V	0.638%	Pass
0.000000 V @ CH6	0.000000 V	-0.000000 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000000 V	0.00923%	Pass
0.000000 V @ CH7	0.000000 V	0.000027 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000027 V	1.3%	Pass
0.000000 V @ CH8	0.000000 V	0.000026 V	-0.002050 V	0.002050 V	3.40 e-06 V	0,000026 V	1.28%	Pass
5.000000 V @ CH1	5.000000 V	5.000077 V	4.995450 V	5.004550 V	110.00 e-06 V	0,000077 V	1.68%	Pass
5.000000 V @ CH2	5.000000 V	5.000057 V	4.995450 V	5.004550 V	110.00 e-06 V	0,000057 V	1.25%	Pass
5.000000 V @ CH3	5.000000 V	5.000047 V	4.995450 V	5.004550 V	110.00 e-06 V	0,000047 V	1.03%	Pass
5.000000 V @ CH4	5.000000 V	5.000043 V	4.995450 V	5.004550 V	110.00 e-06 V	0,000043 V	0.952%	Pass
5.000000 V @ CH5	5.000000 V	5.000043 V	4.995450 V	5.004550 V	110.00 e-06 V	0,000043 V	0.952%	Pass
5.000000 V @ CH6	5.000000 V	4.999993 V	4.995450 V	5.004550 V	110.00 e-06 V	-0,000007 V	0.147%	Pass
5.000000 V @ CH7	5.000000 V	5.000077 V	4.995450 V	5.004550 V	110.00 e-06 V	0,000077 V	1.68%	Pass
5.000000 V @ CH8	5.000000 V	5.000023 V	4.995450 V	5.004550 V	110.00 e-06 V	0,000023 V	0.513%	Pass
9.000000 V @ CH1	9.000000 V	9.000153 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000153 V	2.34%	Pass
9.000000 V @ CH2	9.000000 V	9.000143 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000143 V	2.19%	Pass
9.000000 V @ CH3	9.000000 V	9.000093 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000093 V	1.42%	Pass
9.000000 V @ CH4	9.000000 V	9.000087 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000087 V	1.32%	Pass
9.000000 V @ CH5	9.000000 V	9.000103 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000103 V	1.58%	Pass
9.000000 V @ CH6	9.000000 V	9.000027 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000027 V	0.407%	Pass
9.000000 V @ CH7	9.000000 V	9.000187 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000187 V	2.85%	Pass
9.000000 V @ CH8	9.000000 V	9.000120 V	8.993450 V	9.006550 V	170.00 e-06 V	0,000120 V	1.83%	Pass
30V Range 1MSamples/sec								
-28.00000 V @ CH1	-28.00000 V	-28.00050 V	-28.02005 V	-27.97995 V	480.00 e-06 V	-0,00050 V	2.49%	Pass
-28.00000 V @ CH2	-28.00000 V	-28.00030 V	-28.02005 V	-27.97995 V	480.00 e-06 V	-0,00030 V	1.5%	Pass
-28.00000 V @ CH3	-28.00000 V	-28.00040 V	-28.02005 V	-27.97995 V	480.00 e-06 V	-0,00040 V	2%	Pass
-28.00000 V @ CH4	-28.00000 V	-28.00030 V	-28.02005 V	-27.97995 V	480.00 e-06 V	-0,00030 V	1.5%	Pass
-28.00000 V @ CH5	-28.00000 V	-28.00023 V	-28.02005 V	-27.97995 V	480.00 e-06 V	-0,00023 V	1.16%	Pass
-28.00000 V @ CH6	-28.00000 V	-28.00037 V	-28.02005 V	-27.97995 V	480.00 e-06 V	-0,00037 V	1.83%	Pass

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status
-28.00000 V @ CH7	-28.00000 V	-28.00040 V	-28.02005 V	-27.97995 V	480.00 e-06 V	-0,00040 V	2%	Pass
-28.00000 V @ CH8	-28.00000 V	-28.00000 V	-28.02005 V	-27.97995 V	480.00 e-06 V	0,00000 V	0%	Pass
0.00000 V @ CH1	0.00000 V	0.00009 V	-0.00605 V	0.00605 V	3.40 e-06 V	0,00009 V	1.48%	Pass
0.00000 V @ CH2	0.00000 V	0.00004 V	-0.00605 V	0.00605 V	3.40 e-06 V	0,00004 V	0.736%	Pass
0.00000 V @ CH3	0.00000 V	0.00010 V	-0.00605 V	0.00605 V	3.40 e-06 V	0,00010 V	1.66%	Pass
0.00000 V @ CH4	0.00000 V	0.00009 V	-0.00605 V	0.00605 V	3.40 e-06 V	0,00009 V	1.42%	Pass
0.00000 V @ CH5	0.00000 V	0.00007 V	-0.00605 V	0.00605 V	3.40 e-06 V	0,00007 V	1.18%	Pass
0.00000 V @ CH6	0.00000 V	-0.00001 V	-0.00605 V	0.00605 V	3.40 e-06 V	-0,00001 V	0.211%	Pass
0.00000 V @ CH7	0.00000 V	0.00010 V	-0.00605 V	0.00605 V	3.40 e-06 V	0,00010 V	1.69%	Pass
0.00000 V @ CH8	0.00000 V	0.00012 V	-0.00605 V	0.00605 V	3.40 e-06 V	0,00012 V	1.94%	Pass
28.00000 V @ CH1	28.00000 V	28.00070 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00070 V	3.49%	Pass
28.00000 V @ CH2	28.00000 V	28.00047 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00047 V	2.33%	Pass
28.00000 V @ CH3	28.00000 V	28.00040 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00040 V	2%	Pass
28.00000 V @ CH4	28.00000 V	28.00050 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00050 V	2.49%	Pass
28.00000 V @ CH5	28.00000 V	28.00040 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00040 V	2%	Pass
28.00000 V @ CH6	28.00000 V	28.00023 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00023 V	1.16%	Pass
28.00000 V @ CH7	28.00000 V	28.00070 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00070 V	3.49%	Pass
28.00000 V @ CH8	28.00000 V	28.00060 V	27.97995 V	28.02005 V	480.00 e-06 V	0,00060 V	2.99%	Pass
100V Range 1MSamples/sec								
-90.00000 V @ CH1	-90.00000 V	-90.00143 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00143 V	2.2%	Pass
-90.00000 V @ CH2	-90.00000 V	-90.00117 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00117 V	1.79%	Pass
-90.00000 V @ CH3	-90.00000 V	-90.00167 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00167 V	2.56%	Pass
-90.00000 V @ CH4	-90.00000 V	-90.00147 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00147 V	2.25%	Pass
-90.00000 V @ CH5	-90.00000 V	-90.00120 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00120 V	1.84%	Pass
-90.00000 V @ CH6	-90.00000 V	-90.00130 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00130 V	2%	Pass
-90.00000 V @ CH7	-90.00000 V	-90.00077 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00077 V	1.18%	Pass
-90.00000 V @ CH8	-90.00000 V	-90.00003 V	-90.06505 V	-89.93495 V	2.40 e-03 V	-0,00003 V	0.0512%	Pass
0.00000 V @ CH1	0.00000 V	0.00024 V	-0.02005 V	0.02005 V	7.30 e-06 V	0,00024 V	1.19%	Pass
0.00000 V @ CH2	0.00000 V	0.00017 V	-0.02005 V	0.02005 V	7.30 e-06 V	0,00017 V	0.849%	Pass
0.00000 V @ CH3	0.00000 V	0.00021 V	-0.02005 V	0.02005 V	7.30 e-06 V	0,00021 V	1.04%	Pass
0.00000 V @ CH4	0.00000 V	0.00015 V	-0.02005 V	0.02005 V	7.30 e-06 V	0,00015 V	0.739%	Pass
0.00000 V @ CH5	0.00000 V	0.00012 V	-0.02005 V	0.02005 V	7.30 e-06 V	0,00012 V	0.574%	Pass
0.00000 V @ CH6	0.00000 V	-0.00007 V	-0.02005 V	0.02005 V	7.30 e-06 V	-0,00007 V	0.364%	Pass
0.00000 V @ CH7	0.00000 V	0.00032 V	-0.02005 V	0.02005 V	7.30 e-06 V	0,00032 V	1.59%	Pass
0.00000 V @ CH8	0.00000 V	0.00027 V	-0.02005 V	0.02005 V	7.30 e-06 V	0,00027 V	1.37%	Pass
90.00000 V @ CH1	90.00000 V	90.00203 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00203 V	3.13%	Pass
90.00000 V @ CH2	90.00000 V	90.00187 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00187 V	2.87%	Pass
90.00000 V @ CH3	90.00000 V	90.00180 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00180 V	2.77%	Pass
90.00000 V @ CH4	90.00000 V	90.00163 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00163 V	2.51%	Pass
90.00000 V @ CH5	90.00000 V	90.00190 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00190 V	2.92%	Pass
90.00000 V @ CH6	90.00000 V	90.00123 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00123 V	1.9%	Pass
90.00000 V @ CH7	90.00000 V	90.00190 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00190 V	2.92%	Pass
90.00000 V @ CH8	90.00000 V	90.00177 V	89.93495 V	90.06505 V	2.40 e-03 V	0,00177 V	2.72%	Pass
AC Voltage Calibration								
AC Accuracy:								
for input <= 10V								
DC to 1kHz : 0.05% of reading +/-0.02% of Range +/-50uV								
>1kHz to 10kHz : 0.05% * f of reading +/-0.02% of Range +/-50uV								
for input >= 10V								
DC to 1kHz : 0.05% of reading +/-0.02% of Range +/-50uV								
>1kHz to 10kHz : 1% of reading +/-0.02% of Range +/-50uV								
f: frequency in kHz								
0.1V Range; Butterworth Auto 8.0.; 1MSamples/sec								
Signal: 0.07V(RMS) @ 50Hz								
0.070000 V @ CH1	0.070000 V	0.070004 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000004 V	3.68%	Pass
0.070000 V @ CH2	0.070000 V	0.070004 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000004 V	3.87%	Pass
0.070000 V @ CH3	0.070000 V	0.070004 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000004 V	3.68%	Pass
0.070000 V @ CH4	0.070000 V	0.070002 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000002 V	1.9%	Pass
0.070000 V @ CH5	0.070000 V	0.070004 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000004 V	3.71%	Pass
0.070000 V @ CH6	0.070000 V	0.070002 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000002 V	2.06%	Pass
0.070000 V @ CH7	0.070000 V	0.070001 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000001 V	0.825%	Pass
0.070000 V @ CH8	0.070000 V	0.070003 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000003 V	2.73%	Pass
Signal: 0.07V(RMS) @ 1kHz								
0.070000 V @ CH1	0.070000 V	0.070001 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000001 V	0.667%	Pass
0.070000 V @ CH2	0.070000 V	0.070001 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000001 V	0.984%	Pass
0.070000 V @ CH3	0.070000 V	0.070001 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000001 V	0.762%	Pass
0.070000 V @ CH4	0.070000 V	0.069999 V	0.069895 V	0.070105 V	23.00 e-06 V	-0,000001 V	0.952%	Pass
0.070000 V @ CH5	0.070000 V	0.070001 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000001 V	0.825%	Pass
0.070000 V @ CH6	0.070000 V	0.069999 V	0.069895 V	0.070105 V	23.00 e-06 V	-0,000001 V	0.794%	Pass
0.070000 V @ CH7	0.070000 V	0.069998 V	0.069895 V	0.070105 V	23.00 e-06 V	-0,000002 V	1.71%	Pass
0.070000 V @ CH8	0.070000 V	0.070001 V	0.069895 V	0.070105 V	23.00 e-06 V	0,000001 V	0.508%	Pass
Signal: 0.07V(RMS) @ 10kHz								
0.070000 V @ CH1	0.070000 V	0.069844 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000156 V	37.2%	Pass
0.070000 V @ CH2	0.070000 V	0.069861 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000139 V	33%	Pass
0.070000 V @ CH3	0.070000 V	0.069857 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000143 V	34.1%	Pass
0.070000 V @ CH4	0.070000 V	0.069864 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000136 V	32.5%	Pass

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status	
0.070000 V @ CH5	0.070000 V	0.069851 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000149 V	35.5%	Pass	
0.070000 V @ CH6	0.070000 V	0.069865 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000135 V	32.2%	Pass	
0.070000 V @ CH7	0.070000 V	0.069847 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000153 V	36.4%	Pass	
0.070000 V @ CH8	0.070000 V	0.069865 V	0.069580 V	0.070420 V	23.00 e-06 V	-0,000135 V	32.1%	Pass	
10V Range; Butterworth Auto 8.0.; 1MSamples/sec									
Signal: 7V(RMS) @ 50Hz									
7.000000 V @ CH1	7.000000 V	7.000193 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000193 V	3.48%	Pass	
7.000000 V @ CH2	7.000000 V	7.000080 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000080 V	1.44%	Pass	
7.000000 V @ CH3	7.000000 V	7.000060 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000060 V	1.08%	Pass	
7.000000 V @ CH4	7.000000 V	7.000093 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000093 V	1.68%	Pass	
7.000000 V @ CH5	7.000000 V	7.000030 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000030 V	0.541%	Pass	
7.000000 V @ CH6	7.000000 V	7.000047 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000047 V	0.841%	Pass	
7.000000 V @ CH7	7.000000 V	7.000053 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000053 V	0.961%	Pass	
7.000000 V @ CH8	7.000000 V	7.000020 V	6.994450 V	7.005550 V	2.10 e-03 V	0,000020 V	0.36%	Pass	
Signal: 7V(RMS) @ 1kHz									
7.000000 V @ CH1	7.000000 V	6.999783 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000217 V	3.9%	Pass	
7.000000 V @ CH2	7.000000 V	6.999687 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000313 V	5.65%	Pass	
7.000000 V @ CH3	7.000000 V	6.999680 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000320 V	5.77%	Pass	
7.000000 V @ CH4	7.000000 V	6.999717 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000283 V	5.11%	Pass	
7.000000 V @ CH5	7.000000 V	6.999640 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000360 V	6.49%	Pass	
7.000000 V @ CH6	7.000000 V	6.999637 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000363 V	6.55%	Pass	
7.000000 V @ CH7	7.000000 V	6.999650 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000350 V	6.31%	Pass	
7.000000 V @ CH8	7.000000 V	6.999637 V	6.994450 V	7.005550 V	2.10 e-03 V	-0,000363 V	6.55%	Pass	
Signal: 7V(RMS) @ 10kHz									
7.000000 V @ CH1	7.000000 V	6.995437 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004563 V	12.3%	Pass	
7.000000 V @ CH2	7.000000 V	6.995323 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004677 V	12.6%	Pass	
7.000000 V @ CH3	7.000000 V	6.995217 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004783 V	12.9%	Pass	
7.000000 V @ CH4	7.000000 V	6.995240 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004760 V	12.8%	Pass	
7.000000 V @ CH5	7.000000 V	6.995223 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004777 V	12.9%	Pass	
7.000000 V @ CH6	7.000000 V	6.995037 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004963 V	13.4%	Pass	
7.000000 V @ CH7	7.000000 V	6.995200 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004800 V	13%	Pass	
7.000000 V @ CH8	7.000000 V	6.995120 V	6.962950 V	7.037050 V	2.10 e-03 V	-0,004880 V	13.2%	Pass	
30V Range; Butterworth Auto 8.0.; 1MSamples/sec									
Signal: 21V(RMS) @ 50Hz									
21.00000 V @ CH1	21.00000 V	21.00090 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00090 V	5.44%	Pass	
21.00000 V @ CH2	21.00000 V	21.00070 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00070 V	4.23%	Pass	
21.00000 V @ CH3	21.00000 V	21.00080 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00080 V	4.83%	Pass	
21.00000 V @ CH4	21.00000 V	21.00070 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00070 V	4.23%	Pass	
21.00000 V @ CH5	21.00000 V	21.00070 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00070 V	4.23%	Pass	
21.00000 V @ CH6	21.00000 V	21.00060 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00060 V	3.63%	Pass	
21.00000 V @ CH7	21.00000 V	21.00090 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00090 V	5.44%	Pass	
21.00000 V @ CH8	21.00000 V	21.00060 V	20.98345 V	21.01655 V	4.70 e-03 V	0,00060 V	3.63%	Pass	
Signal: 21V(RMS) @ 1kHz									
21.00000 V @ CH1	21.00000 V	20.99990 V	20.98345 V	21.01655 V	8.00 e-03 V	-0,00010 V	0.604%	Pass	
21.00000 V @ CH2	21.00000 V	20.99860 V	20.98345 V	21.01655 V	8.00 e-03 V	-0,00140 V	8.46%	Pass	
21.00000 V @ CH3	21.00000 V	21.00030 V	20.98345 V	21.01655 V	8.00 e-03 V	0,00030 V	1.81%	Pass	
21.00000 V @ CH4	21.00000 V	21.00010 V	20.98345 V	21.01655 V	8.00 e-03 V	0,00010 V	0.604%	Pass	
21.00000 V @ CH5	21.00000 V	20.99950 V	20.98345 V	21.01655 V	8.00 e-03 V	-0,00050 V	3.02%	Pass	
21.00000 V @ CH6	21.00000 V	20.99923 V	20.98345 V	21.01655 V	8.00 e-03 V	-0,00077 V	4.63%	Pass	
21.00000 V @ CH7	21.00000 V	20.99990 V	20.98345 V	21.01655 V	8.00 e-03 V	-0,00010 V	0.604%	Pass	
21.00000 V @ CH8	21.00000 V	21.00010 V	20.98345 V	21.01655 V	8.00 e-03 V	0,00010 V	0.604%	Pass	
Signal: 21V(RMS) @ 10kHz									
21.00000 V @ CH1	21.00000 V	20.97583 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02417 V	11.2%	Pass	
21.00000 V @ CH2	21.00000 V	20.97737 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02263 V	10.5%	Pass	
21.00000 V @ CH3	21.00000 V	20.97477 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02523 V	11.7%	Pass	
21.00000 V @ CH4	21.00000 V	20.97177 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02823 V	13.1%	Pass	
21.00000 V @ CH5	21.00000 V	20.97400 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02600 V	12%	Pass	
21.00000 V @ CH6	21.00000 V	20.97137 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02863 V	13.3%	Pass	
21.00000 V @ CH7	21.00000 V	20.97570 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02430 V	11.2%	Pass	
21.00000 V @ CH8	21.00000 V	20.97330 V	20.78395 V	21.21605 V	8.00 e-03 V	-0,02670 V	12.4%	Pass	
SNR Test									
0V @ 10V Range; 100kS/sec									
112.00 dB @ CH1	112.00 dB	115.35 dB	109.00 dB	213.00 dB		3,35 dB	3.32%	Pass	(1)
112.00 dB @ CH2	112.00 dB	114.95 dB	109.00 dB	213.00 dB		2,95 dB	2.92%	Pass	(1)
112.00 dB @ CH3	112.00 dB	114.93 dB	109.00 dB	213.00 dB		2,93 dB	2.9%	Pass	(1)
112.00 dB @ CH4	112.00 dB	115.24 dB	109.00 dB	213.00 dB		3,24 dB	3.21%	Pass	(1)
112.00 dB @ CH5	112.00 dB	114.72 dB	109.00 dB	213.00 dB		2,72 dB	2.7%	Pass	(1)
112.00 dB @ CH6	112.00 dB	115.13 dB	109.00 dB	213.00 dB		3,13 dB	3.1%	Pass	(1)
112.00 dB @ CH7	112.00 dB	114.36 dB	109.00 dB	213.00 dB		2,36 dB	2.33%	Pass	(1)
112.00 dB @ CH8	112.00 dB	114.82 dB	109.00 dB	213.00 dB		2,82 dB	2.79%	Pass	(1)
Short Circuit Input; 100mV Range; 1kS/sec									
105.00 dB @ CH1	105.00 dB	136.60 dB	100.00 dB	210.00 dB		31,60 dB	30.1%	Pass	(1)
105.00 dB @ CH2	105.00 dB	119.12 dB	100.00 dB	210.00 dB		14,12 dB	13.4%	Pass	(1)
105.00 dB @ CH3	105.00 dB	119.79 dB	100.00 dB	210.00 dB		14,79 dB	14.1%	Pass	(1)
105.00 dB @ CH4	105.00 dB	118.81 dB	100.00 dB	210.00 dB		13,81 dB	13.2%	Pass	(1)
105.00 dB @ CH5	105.00 dB	114.88 dB	100.00 dB	210.00 dB		9,88 dB	9.4%	Pass	(1)
105.00 dB @ CH6	105.00 dB	118.12 dB	100.00 dB	210.00 dB		13,12 dB	12.5%	Pass	(1)
105.00 dB @ CH7	105.00 dB	120.58 dB	100.00 dB	210.00 dB		15,58 dB	14.8%	Pass	(1)
105.00 dB @ CH8	105.00 dB	120.89 dB	100.00 dB	210.00 dB		15,89 dB	15.1%	Pass	(1)

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status	
9V @ 10V Range; 100kS/sec									
112.00 dB @ CH1	112.00 dB	121.16 dB	109.00 dB	213.00 dB		9,16 dB	9.07%	Pass	(1)
112.00 dB @ CH2	112.00 dB	128.38 dB	109.00 dB	213.00 dB		16,38 dB	16.2%	Pass	(1)
112.00 dB @ CH3	112.00 dB	130.86 dB	109.00 dB	213.00 dB		18,86 dB	18.7%	Pass	(1)
112.00 dB @ CH4	112.00 dB	135.55 dB	109.00 dB	213.00 dB		23,55 dB	23.3%	Pass	(1)
112.00 dB @ CH5	112.00 dB	130.42 dB	109.00 dB	213.00 dB		18,42 dB	18.2%	Pass	(1)
112.00 dB @ CH6	112.00 dB	144.54 dB	109.00 dB	213.00 dB		32,54 dB	32.2%	Pass	(1)
112.00 dB @ CH7	112.00 dB	129.77 dB	109.00 dB	213.00 dB		17,77 dB	17.6%	Pass	(1)
112.00 dB @ CH8	112.00 dB	122.81 dB	109.00 dB	213.00 dB		10,81 dB	10.7%	Pass	(1)
Internal Reference Calibration									
0.045000 V @ Int_Ref	0.045000 V	0.044986 V	0.044907 V	0.045093 V		-0,000014 V	15%	Pass	(1)
4.000000 V @ Int_Ref	4.000000 V	4.000024 V	3.995950 V	4.004050 V		0,000024 V	0.593%	Pass	(1)
Low Pass Filter Test									
10kHz Filter									
Butterworth 8.0; 10V Range; test signal 3V @ 10kHz									
-3.00 dB @ CH1	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.57%	Pass	(1)
-3.00 dB @ CH2	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.6%	Pass	(1)
-3.00 dB @ CH3	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.6%	Pass	(1)
-3.00 dB @ CH4	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.59%	Pass	(1)
-3.00 dB @ CH5	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.6%	Pass	(1)
-3.00 dB @ CH6	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.61%	Pass	(1)
-3.00 dB @ CH7	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.6%	Pass	(1)
-3.00 dB @ CH8	-3.00 dB	-3.02 dB	-4.00 dB	-2.00 dB		-0,02 dB	1.62%	Pass	(1)
Analog Bandwidth Test									
30V Range									
Filter Off; test signal 3V @ 201kHz									
-3.00 dB @ CH1	-3.00 dB	-2.95 dB	-3.50 dB	-1.00 dB		0,05 dB	2.51%	Pass	(1)
-3.00 dB @ CH2	-3.00 dB	-2.86 dB	-3.50 dB	-1.00 dB		0,14 dB	6.92%	Pass	(1)
-3.00 dB @ CH3	-3.00 dB	-2.99 dB	-3.50 dB	-1.00 dB		0,01 dB	0.403%	Pass	(1)
-3.00 dB @ CH4	-3.00 dB	-3.04 dB	-3.50 dB	-1.00 dB		-0,04 dB	7.06%	Pass	(1)
-3.00 dB @ CH5	-3.00 dB	-3.00 dB	-3.50 dB	-1.00 dB		0,00 dB	0.16%	Pass	(1)
-3.00 dB @ CH6	-3.00 dB	-3.06 dB	-3.50 dB	-1.00 dB		-0,06 dB	12%	Pass	(1)
-3.00 dB @ CH7	-3.00 dB	-2.97 dB	-3.50 dB	-1.00 dB		0,03 dB	1.3%	Pass	(1)
-3.00 dB @ CH8	-3.00 dB	-3.01 dB	-3.50 dB	-1.00 dB		-0,01 dB	1.43%	Pass	(1)
10V Range									
Filter Off; test signal 3V @ 201kHz									
-3.00 dB @ CH1	-3.00 dB	-2.91 dB	-3.50 dB	-1.00 dB		0,09 dB	4.56%	Pass	(1)
-3.00 dB @ CH2	-3.00 dB	-2.91 dB	-3.50 dB	-1.00 dB		0,09 dB	4.65%	Pass	(1)
-3.00 dB @ CH3	-3.00 dB	-2.92 dB	-3.50 dB	-1.00 dB		0,08 dB	3.86%	Pass	(1)
-3.00 dB @ CH4	-3.00 dB	-2.91 dB	-3.50 dB	-1.00 dB		0,09 dB	4.53%	Pass	(1)
-3.00 dB @ CH5	-3.00 dB	-2.92 dB	-3.50 dB	-1.00 dB		0,08 dB	4%	Pass	(1)
-3.00 dB @ CH6	-3.00 dB	-2.96 dB	-3.50 dB	-1.00 dB		0,04 dB	1.8%	Pass	(1)
-3.00 dB @ CH7	-3.00 dB	-2.93 dB	-3.50 dB	-1.00 dB		0,07 dB	3.62%	Pass	(1)
-3.00 dB @ CH8	-3.00 dB	-2.93 dB	-3.50 dB	-1.00 dB		0,07 dB	3.45%	Pass	(1)
100mV Range									
Filter Off; test signal 30mV @ 101kHz									
-2.50 dB @ CH1	-2.50 dB	-2.25 dB	-3.00 dB	-1.00 dB		0,25 dB	17%	Pass	(1)
-2.50 dB @ CH2	-2.50 dB	-2.08 dB	-3.00 dB	-1.00 dB		0,42 dB	28.3%	Pass	(1)
-2.50 dB @ CH3	-2.50 dB	-2.13 dB	-3.00 dB	-1.00 dB		0,37 dB	24.8%	Pass	(1)
-2.50 dB @ CH4	-2.50 dB	-2.02 dB	-3.00 dB	-1.00 dB		0,48 dB	31.7%	Pass	(1)
-2.50 dB @ CH5	-2.50 dB	-2.18 dB	-3.00 dB	-1.00 dB		0,32 dB	21.1%	Pass	(1)
-2.50 dB @ CH6	-2.50 dB	-2.01 dB	-3.00 dB	-1.00 dB		0,49 dB	32.5%	Pass	(1)
-2.50 dB @ CH7	-2.50 dB	-2.20 dB	-3.00 dB	-1.00 dB		0,30 dB	20.2%	Pass	(1)
-2.50 dB @ CH8	-2.50 dB	-2.02 dB	-3.00 dB	-1.00 dB		0,48 dB	32.3%	Pass	(1)
Inter Channel Phase Mismatch 10V Range									
test signal 3V @ 10kHz									
0.000 _ns @ CH1	0.000 _ns	0.000 _ns	-70.000 _ns	70.000 _ns		0,000 _ns	0%	Pass	(1)
0.000 _ns @ CH2	0.000 _ns	-25.038 _ns	-70.000 _ns	70.000 _ns		-25,038 _ns	35.8%	Pass	(1)
0.000 _ns @ CH3	0.000 _ns	3.934 _ns	-70.000 _ns	70.000 _ns		3,934 _ns	5.62%	Pass	(1)
0.000 _ns @ CH4	0.000 _ns	-28.147 _ns	-70.000 _ns	70.000 _ns		-28,147 _ns	40.2%	Pass	(1)
0.000 _ns @ CH5	0.000 _ns	3.070 _ns	-70.000 _ns	70.000 _ns		3,070 _ns	4.39%	Pass	(1)
0.000 _ns @ CH6	0.000 _ns	-33.958 _ns	-70.000 _ns	70.000 _ns		-33,958 _ns	48.5%	Pass	(1)
0.000 _ns @ CH7	0.000 _ns	1.671 _ns	-70.000 _ns	70.000 _ns		1,671 _ns	2.39%	Pass	(1)
0.000 _ns @ CH8	0.000 _ns	-26.975 _ns	-70.000 _ns	70.000 _ns		-26,975 _ns	38.5%	Pass	(1)
CMRR test at 50Hz in 10V Range									
72.0 dB @ CH1	72.0 dB	84.4 dB	72.0 dB	197.0 dB		12,4 dB	9.93%	Pass	(1)
72.0 dB @ CH2	72.0 dB	81.5 dB	72.0 dB	197.0 dB		9,5 dB	7.59%	Pass	(1)
72.0 dB @ CH3	72.0 dB	79.5 dB	72.0 dB	197.0 dB		7,5 dB	5.97%	Pass	(1)
72.0 dB @ CH4	72.0 dB	84.1 dB	72.0 dB	197.0 dB		12,1 dB	9.66%	Pass	(1)
72.0 dB @ CH5	72.0 dB	79.9 dB	72.0 dB	197.0 dB		7,9 dB	6.29%	Pass	(1)
72.0 dB @ CH6	72.0 dB	83.7 dB	72.0 dB	197.0 dB		11,7 dB	9.34%	Pass	(1)
72.0 dB @ CH7	72.0 dB	78.6 dB	72.0 dB	197.0 dB		6,6 dB	5.31%	Pass	(1)
72.0 dB @ CH8	72.0 dB	80.3 dB	72.0 dB	197.0 dB		8,3 dB	6.67%	Pass	(1)
CMRR test at 1kHz in 10V Range									
72.0 dB @ CH1	72.0 dB	83.4 dB	72.0 dB	197.0 dB		11,4 dB	9.15%	Pass	(1)

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status	
72.0 dB @ CH2	72.0 dB	81.1 dB	72.0 dB	197.0 dB		9,1 dB	7.27%	Pass	(1)
72.0 dB @ CH3	72.0 dB	79.1 dB	72.0 dB	197.0 dB		7,1 dB	5.67%	Pass	(1)
72.0 dB @ CH4	72.0 dB	83.2 dB	72.0 dB	197.0 dB		11,2 dB	8.97%	Pass	(1)
72.0 dB @ CH5	72.0 dB	79.5 dB	72.0 dB	197.0 dB		7,5 dB	6.01%	Pass	(1)
72.0 dB @ CH6	72.0 dB	82.8 dB	72.0 dB	197.0 dB		10,8 dB	8.66%	Pass	(1)
72.0 dB @ CH7	72.0 dB	78.3 dB	72.0 dB	197.0 dB		6,3 dB	5.05%	Pass	(1)
72.0 dB @ CH8	72.0 dB	79.9 dB	72.0 dB	197.0 dB		7,9 dB	6.31%	Pass	(1)
Excitation Voltage Calibration									
Excitation Accuracy: 0.05% of Value +/-1mV									
Excitation Voltage Monitor Accuracy: 0.05% of Value +/-3mV									
CH1	1.0000 V	0.999868 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000132 V	8.83%	Pass	
CH1 Monitor	1.0000 V	0.999919 V	0.996500 V	1.003500 V		-0,000081 V	2.31%	Pass	(1)
CH1	5.0000 V	4.999770 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000230 V	6.56%	Pass	
CH1 Monitor	5.0000 V	4.999930 V	4.994500 V	5.005500 V		-0,000070 V	1.27%	Pass	(1)
CH1	10.000 V	10.00000 V	9.99400 V	10.00600 V	87.00 e-06 V	0,00000 V	0.0762%	Pass	
CH1 Monitor	10.000 V	9.99999 V	9.99200 V	10.00800 V		-0,00001 V	0.125%	Pass	(1)
CH2	1.0000 V	0.999904 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000096 V	6.4%	Pass	
CH2 Monitor	1.0000 V	0.999952 V	0.996500 V	1.003500 V		-0,000048 V	1.37%	Pass	(1)
CH2	5.0000 V	4.999407 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000593 V	17%	Pass	
CH2 Monitor	5.0000 V	4.999550 V	4.994500 V	5.005500 V		-0,000450 V	8.18%	Pass	(1)
CH2	10.000 V	9.99984 V	9.99400 V	10.00600 V	87.00 e-06 V	-0,00016 V	2.73%	Pass	
CH2 Monitor	10.000 V	9.99999 V	9.99200 V	10.00800 V		-0,00001 V	0.125%	Pass	(1)
CH3	1.0000 V	0.999932 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000068 V	4.5%	Pass	
CH3 Monitor	1.0000 V	0.999987 V	0.996500 V	1.003500 V		-0,000013 V	0.371%	Pass	(1)
CH3	5.0000 V	4.999865 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000135 V	3.86%	Pass	
CH3 Monitor	5.0000 V	5.000010 V	4.994500 V	5.005500 V		0,000010 V	0.182%	Pass	(1)
CH3	10.000 V	10.00019 V	9.99400 V	10.00600 V	87.00 e-06 V	0,00019 V	3.23%	Pass	
CH3 Monitor	10.000 V	9.99999 V	9.99200 V	10.00800 V		-0,00001 V	0.125%	Pass	(1)
CH4	1.0000 V	0.999928 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000072 V	4.82%	Pass	
CH4 Monitor	1.0000 V	0.999973 V	0.996500 V	1.003500 V		-0,000027 V	0.771%	Pass	(1)
CH4	5.0000 V	4.999808 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000192 V	5.5%	Pass	
CH4 Monitor	5.0000 V	4.999940 V	4.994500 V	5.005500 V		-0,000060 V	1.09%	Pass	(1)
CH4	10.000 V	10.00005 V	9.99400 V	10.00600 V	87.00 e-06 V	0,00005 V	0.833%	Pass	
CH4 Monitor	10.000 V	9.99999 V	9.99200 V	10.00800 V		-0,00001 V	0.125%	Pass	(1)
CH5	1.0000 V	0.999985 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000015 V	0.993%	Pass	
CH5 Monitor	1.0000 V	1.000030 V	0.996500 V	1.003500 V		0,000030 V	0.857%	Pass	(1)
CH5	5.0000 V	4.999510 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000490 V	14%	Pass	
CH5 Monitor	5.0000 V	4.999650 V	4.994500 V	5.005500 V		-0,000350 V	6.36%	Pass	(1)
CH5	10.000 V	10.00000 V	9.99400 V	10.00600 V	87.00 e-06 V	0,00000 V	0.0109%	Pass	
CH5 Monitor	10.000 V	9.99999 V	9.99200 V	10.00800 V		-0,00001 V	0.125%	Pass	(1)
CH6	1.0000 V	0.999962 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000038 V	2.51%	Pass	
CH6 Monitor	1.0000 V	0.999986 V	0.996500 V	1.003500 V		-0,000014 V	0.4%	Pass	(1)
CH6	5.0000 V	4.999463 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000537 V	15.3%	Pass	
CH6 Monitor	5.0000 V	4.999550 V	4.994500 V	5.005500 V		-0,000450 V	8.18%	Pass	(1)
CH6	10.000 V	9.99983 V	9.99400 V	10.00600 V	87.00 e-06 V	-0,00017 V	2.82%	Pass	
CH6 Monitor	10.000 V	9.99998 V	9.99200 V	10.00800 V		-0,00002 V	0.25%	Pass	(1)
CH7	1.0000 V	0.999992 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000008 V	0.521%	Pass	
CH7 Monitor	1.0000 V	1.000060 V	0.996500 V	1.003500 V		0,000060 V	1.71%	Pass	(1)
CH7	5.0000 V	4.999545 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000455 V	13%	Pass	
CH7 Monitor	5.0000 V	4.999730 V	4.994500 V	5.005500 V		-0,000270 V	4.91%	Pass	(1)
CH7	10.000 V	10.00000 V	9.99400 V	10.00600 V	87.00 e-06 V	0,00000 V	0.0149%	Pass	
CH7 Monitor	10.000 V	9.99999 V	9.99200 V	10.00800 V		-0,00001 V	0.125%	Pass	(1)
CH8	1.0000 V	0.999984 V	0.998500 V	1.001500 V	11.00 e-06 V	-0,000016 V	1.09%	Pass	
CH8 Monitor	1.0000 V	1.000020 V	0.996500 V	1.003500 V		0,000020 V	0.571%	Pass	(1)
CH8	5.0000 V	4.999462 V	4.996500 V	5.003500 V	46.00 e-06 V	-0,000538 V	15.4%	Pass	
CH8 Monitor	5.0000 V	4.999590 V	4.994500 V	5.005500 V		-0,000410 V	7.45%	Pass	(1)
CH8	10.000 V	9.99975 V	9.99400 V	10.00600 V	87.00 e-06 V	-0,00025 V	4.22%	Pass	
CH8 Monitor	10.000 V	9.99999 V	9.99200 V	10.00800 V		-0,00001 V	0.125%	Pass	(1)
Sensor Supply Calibration									
Sensor Supply Accuracy: 3% of Value									
CH1	2.0000 V	1.984928 V	1.940000 V	2.060000 V	21.00 e-06 V	-0,015072 V	25.1%	Pass	
CH1	12.000 V	12.00311 V	11.64000 V	12.36000 V	170.00 e-06 V	0,00311 V	0.864%	Pass	
CH1	24.000 V	23.97590 V	23.28000 V	24.72000 V	300.00 e-06 V	-0,02410 V	3.35%	Pass	
CH2	2.0000 V	1.987845 V	1.940000 V	2.060000 V	21.00 e-06 V	-0,012155 V	20.3%	Pass	
CH2	12.000 V	12.01182 V	11.64000 V	12.36000 V	170.00 e-06 V	0,01182 V	3.28%	Pass	
CH2	24.000 V	23.99184 V	23.28000 V	24.72000 V	300.00 e-06 V	-0,00816 V	1.13%	Pass	
CH3	2.0000 V	2.005616 V	1.940000 V	2.060000 V	21.00 e-06 V	0,005616 V	9.36%	Pass	
CH3	12.000 V	12.02657 V	11.64000 V	12.36000 V	170.00 e-06 V	0,02657 V	7.38%	Pass	
CH3	24.000 V	24.00769 V	23.28000 V	24.72000 V	300.00 e-06 V	0,00769 V	1.07%	Pass	
CH4	2.0000 V	2.004511 V	1.940000 V	2.060000 V	21.00 e-06 V	0,004511 V	7.52%	Pass	
CH4	12.000 V	11.98197 V	11.64000 V	12.36000 V	170.00 e-06 V	-0,01803 V	5.01%	Pass	
CH4	24.000 V	23.98817 V	23.28000 V	24.72000 V	300.00 e-06 V	-0,01183 V	1.64%	Pass	
CH5	2.0000 V	1.993367 V	1.940000 V	2.060000 V	21.00 e-06 V	-0,006633 V	11.1%	Pass	
CH5	12.000 V	12.00991 V	11.64000 V	12.36000 V	170.00 e-06 V	0,00991 V	2.75%	Pass	
CH5	24.000 V	23.98042 V	23.28000 V	24.72000 V	300.00 e-06 V	-0,01958 V	2.72%	Pass	
CH6	2.0000 V	2.000151 V	1.940000 V	2.060000 V	21.00 e-06 V	0,000151 V	0.252%	Pass	
CH6	12.000 V	11.98874 V	11.64000 V	12.36000 V	170.00 e-06 V	-0,01126 V	3.13%	Pass	
CH6	24.000 V	24.01099 V	23.28000 V	24.72000 V	300.00 e-06 V	0,01099 V	1.53%	Pass	

DEWETRON GmbH
Parkring 4
8074 Grambach
AUSTRIA

Kalibrierschein nach ISO/IEC 17025
Calibration Certificate according to ISO/IEC 17025

AAT2540652
Akkreditierung Austria
0632
29.10.2025

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status	
CH7	2.0000 V	2.031513 V	1.940000 V	2.060000 V	21.00 e-06 V	0,031513 V	52.5%	Pass	
CH7	12.000 V	11.99768 V	11.64000 V	12.36000 V	170.00 e-06 V	-0,00232 V	0.645%	Pass	
CH7	24.000 V	23.99112 V	23.28000 V	24.72000 V	300.00 e-06 V	-0,00888 V	1.23%	Pass	
CH8	2.0000 V	1.998825 V	1.940000 V	2.060000 V	21.00 e-06 V	-0,001175 V	1.96%	Pass	
CH8	12.000 V	12.00940 V	11.64000 V	12.36000 V	170.00 e-06 V	0,00940 V	2.61%	Pass	
CH8	24.000 V	23.97423 V	23.28000 V	24.72000 V	300.00 e-06 V	-0,02577 V	3.58%	Pass	
Hardware Check (Selftest)								Pass	(1)
Temperature	53.00 °C	53.94 °C	43.00 °C	63.00 °C		0,94 °C	9.4%	Pass	(1)

Ende des Kalibrierscheines / *End of Calibration Certificate*