



ISO/IEC 17025:2017

מעבדות כיוול

תעודת הסמכה מס' 532 אלטל טכנולוגיסטיקה בע"מ

כתובת אתר ייחוס: הסיבים 18, פתח תקוה 4959376

עד יום: 31.07.2025

בתוקף מיום: 14.06.2023

הארגון נבדק ונבחן על ידי הרשות הלאומית להסמכת מעבדות (להלן הרשות) ונמצא ראוי להסמכה בהתאם לנספח פירוט היקף ההסמכה המצורף לתעודה זו, המהווה חלק בלתי נפרד ממנה ומספרו זהה למספר התעודה. הסמכה מצביעה על כשירות מקצועית ותפעול מערכת ניהול איכות בעלת הכרה בינלאומית. הארגון המוסמך על ידי הרשות, עומד בתקנים/ בדרישות המפורטים מעלה. דרישות התקנים הם לכשירות מקצועית ולמערכות ניהול, שהינן הכרחיות למתן תוצאות אמינות. הסמכה זו ניתנה בהתאם לכללי ISO/IEC 17011:2017 לפיהם פועלת הרשות ובמסגרתם מקיימת פיקוח שוטף על הארגון לצורך בחינת תפקודו המתמשך בהתאם לדרישות ההסמכה. ההסמכה תקפה כל עוד הארגון עונה לאמות המידה שנקבעו על ידי הרשות. הרשות חתומה על הסכם הכרה רב צדדי (MLA) מול ארגון (EA) European Accreditation Cooperation.

תעודה זו אינה מהווה אישור לפי סעיף 12 לחוק התקנים.

אתי פלר
מנכ"ל
הרשות הלאומית להסמכת מעבדות

תאריך הסמכה ראשון: 01.08.2021



הרשות הלאומית להסמכת מעבדות
Israel Laboratory Accreditation Authority

Calibration Laboratories

ISO/IEC 17025:2017

Accreditation Certificate No. 532

El Tel Technologists LTD

Main site address: HaSibim 18, Petach Tikva ,4959376

Valid from: 14.06.2023

Until: 31.07.2025

The organization was assessed by the Israel Laboratory Accreditation Authority (ISRAC) and found to be worthy of accreditation to the detailed schedule attached.

The schedule is an integral part of this certificate and is numbered with the above certificate number.

Accreditation demonstrates technical competence and operation of an internationally recognized quality management system.

The organization accredited by ISRAC complies with the standards/requirements mentioned above, meets the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically competent results. This accreditation is granted in accordance with the requirements of ISO/IEC 17011:2017, and entails periodic surveillance and reassessment by ISRAC to ensure that the organization continues to comply with the accreditation requirements.

The accreditation is valid provided that the organization continues to meet the criteria as laid down by ISRAC. ISRAC is an EA-MLA (European Accreditation Cooperation Multi-Lateral Agreement) signatory.

This certificate does not constitute an approval in accordance with article 12 of the standard law.

Etty Feller
General Manager
Israel Laboratory Accreditation Authority

Date of first accreditation: 01.08.2021

Date of signature 14/06/2023

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Name and Address:

Organization name	El Tel Technologists LTD.
Address	HaSibim 18, Petach Tikva
Phone	972-03-9205253
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E-mail (contact person]	rafil@eltel.co.il

Site: P or T or M , P-Permanent, T-Temporary, M-Mobile

A permanent (P] or temporary (T] place, or a stationary or mobile (M] facility, at or from which the organization performs activities forming part of its scope of accreditation, starting from sampling to final issuance of a report or certificate and / or quality system activities. A temporary (T] site is a site established under the responsibility of an accredited permanent site. All activities performed at a temporary site are the responsibility of the permanent site. An outdoors work is also considered to be a temporary site. Temporary site will be a site that involves work for special project and the activity will be defined in time (up to 2 years].

Type of Scopes: A- Fixed, C- Flexible scope in analytical tests : Type of matrix, analytes, experimental systems and/or analytical characteristics may be subject to changes, in accordance with the laboratory's approved and documented procedures. For details, please refer to the list of Accredited Tests, available from the laboratory upon request.



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	Uncertainty of Measurement ¹	Reference Documents	Remarks	
Calibration					כיוול – גדלים חשמליים – זרם ישר, תדר נמוך			
1	A	P	DC Voltage, Measuring Instruments	מתח מזרם ישר, מכשירי מדידה	0 mV	1.7 μ V	Manufacturer Instructions SM-6.2.2	Fluke 5522A
2	A	P			100 mV	3.6 μ V		
3	A	P			1 V	15 μ V		
4	A	P			10 V	0.16 mV		
5	A	P			100 V	2.3 mV		
6	A	P			(0 μ V to 330 mV]	8.9 μ V		
7	A	P			(0.33 V to 3.3 V]	58 μ V		
8	A	P			(3.3 V to 33 V]	0.66 mV		
9	A	P			(33 V to 330 V]	7.3 mV		
10	A	P			(330 V to 1000 V]	23 mV		
11	A	P	DC Current, Measuring Instruments	זרם ישר, מכשירי מדידה	0 μ A	0.03 μ A	Manufacturer Instructions SM-6.2.2	Fluke 5522A
12	A	P			100 μ A	0.04 μ A		
13	A	P			1 mA	0.17 μ A		
14	A	P			10 mA	1.5 μ A		
15	A	P			100 mA	23 μ A		
16	A	P			1 A	0.34 mA		
17	A	P			(0.1 μ A to 330 μ A]	0.081 μ A		
18	A	P			(330 μ A to 3.3 mA]	0.45 μ A		
19	A	P			(3.3 mA to 33 mA]	4.5 μ A		



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Calibration					כיוול – גדלים חשמליים – זרם ישר, תדור נמוך			
20	A	P		(33 mA to 330 mA]	95 μ A			
21	A	P		(330 mA to 3 A]	2.4 mA			
22	A	P	DC Resistance, Measuring Instruments	התנגדות זרם ישר, מכשירי מדידה	100 Ω	Manufacturer Instructions SM-6.2.2	Fluke 5522A	
23					1000 Ω			0.036 Ω
24	A	P			10 k Ω			0.36 Ω
25	A	P			100 k Ω			3.5 Ω
26	A	P			1.0 M Ω			40 Ω
27	A	P			10 M Ω			1.6 k Ω
28	A	P			(0 Ω to 11 Ω]			0.012 Ω
29	A	P			(11 Ω to 33 Ω]			0.019 Ω
30	A	P			(33 Ω to 110 Ω]			0.022 Ω
31	A	P			(110 Ω to 330 Ω]			0.034 Ω
32	A	P			(330 Ω to 1.1 k Ω]			0.073 Ω
33	A	P			(1.1 k Ω to 3.3 k Ω]			0.34 Ω
34	A	P			(3.3 k Ω to 11 k Ω]			0.57 Ω
35	A	P			(11 k Ω to 33 k Ω]			2.2 Ω
36	A	P			(33 k Ω to 110 k Ω]			8.0 Ω
37	A	P			(110 k Ω to 330 k Ω]			25 Ω
38	A	P	(330 k Ω to 1.1 M Ω]	150 Ω				



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Calibration					כיוול – גדלים חשמליים – זרם ישר, תדור נמוך		
39	A	P		(1.1 MΩ to 3.3 MΩ]	426 Ω		
40	A	P		(3.3 MΩ to 11 MΩ]	9.1 kΩ		
41	A	P		(11 MΩ to 33 MΩ]	15 kΩ		
42	A	P		(33 MΩ to 100 MΩ]	62 kΩ		
43	A	P	AC Voltage, Measuring Instruments	מתח חילופין, מכשירי מדידה	100 mV	Manufacturer Instructions SM-6.2.2	Fluke 5522A
44	A	P		(20 Hz to 45 Hz]	54 μV		
45	A	P		(45 Hz to 10 kHz]	26 μV		
46	A	P		(10 kHz to 20 kHz]	53 μV		
47	A	P		(20 kHz to 50 kHz]	114 μV		
48	A	P		(50 kHz to 100 kHz]	130 μV		
49	A	P		1 V			
50	A	P		(20 Hz to 45 Hz]	0.46 mV		
51	A	P		(45 Hz to 10 kHz]	0.24 mV		
52	A	P		(10 kHz to 20 kHz]	0.37 mV		
53	A	P		(20 kHz to 50 kHz]	0.40 mV		
54	A	P		(50 kHz to 100 kHz]	1.36 mV		
55	A	P		10 V			
				(20 Hz to 45 Hz]	4.2 mV		
				(45 Hz to 10 kHz]	2.9 mV		
				(10 kHz to 20 kHz]	3.8 mV		



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Calibration					כיוול – גדלים חשמליים – זרם ישר, תדור נמוך		
56	A	P		(20 kHz to 50 kHz]	5.0 mV		
57	A	P		(50 kHz to 100 kHz]	12 mV		
58	A	P		100 V (55 Hz to 1 kHz]	25 mV		
59	A	P		(1 kHz to 10 kHz]	30 mV		
60	A	P		(10 kHz to 20 kHz]	36 mV		
61	A	P		(20 kHz to 50 kHz]	42 mV		
62	A	P		(50 kHz to 100 kHz]	290 mV		
63	A	P		(100 mV to 330 mV] (20 Hz to 45 Hz]	0.13 mV		
64	A	P		(45 Hz to 10 kHz]	69 μV		
65	A	P		(10 kHz to 20 kHz]	126 μV		
66	A	P		(20 kHz to 50 kHz]	0.14 mV		
67	A	P		(50 kHz to 100 kHz]	1.14 mV		
68	A	P		(0.33 V to 3.3 V] (20 Hz to 45 Hz]	1.2 mV		
69	A	P		(45 Hz to 10 kHz]	1.6 mV		
70	A	P		(10 kHz to 20 kHz]	1.7 mV		
71	A	P		(20 kHz to 50 kHz]	1.9 mV		
72	A	P		(50 kHz to 100 kHz]	3.0 mV		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	Uncertainty of Measurement ¹	Reference Documents	Remarks	
Calibration					כיוול – גדלים חשמליים – זרם ישר, תדור נמוך			
73	A	P		(3.3 V to 33 V] (55 Hz to 10 kHz]	7.7 mV			
74	A	P		(10 kHz to 20 kHz]	10 mV			
75	A	P		(20 kHz to 50 kHz]	14 mV			
76	A	P		(50 kHz to 100 kHz]	36 mV			
77	A	P		(33 V to 330 V] (55 Hz to 1 kHz]	91 mV			
78	A	P		(1 kHz to 10 kHz]	100 mV			
79	A	P		(330 V to 750 V] (55 Hz to 1 kHz]	0.28 V			
80	A	P		(1 kHz to 5 kHz]	0.24 V			
81	A	P	(5 kHz to 10 kHz]	0.28 V				
82	A	P	AC Current, Measuring Instruments	זרם חילופין, מכשירי מדידה	1 A 1 kHz	Manufacturer Instructions SM-6.2.2	Fluke 5522A	
83	A	P			2.2 A 1 kHz			6.5 mA
84	A	P			(3.3 mA to 33 mA] (55 Hz to 1 kHz]			18 μA
85	A	P			(1 kHz to 5 kHz]			34 μA
86	A	P			(33 mA to 330 mA] (55 Hz to 1 kHz]			0.19 mA



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	Uncertainty of Measurement ¹	Reference Documents	Remarks
Calibration					כיוול – גדלים חשמליים – זרם ישר, תדור נמוך		
87	A	P		(1 kHz to 5 kHz)	0.44 mA		
88	A	P		(330 mA to 3 A) (55 Hz to 1 kHz)	2.4 mA		
89	A	P		(1 kHz to 5 kHz)	22 mA		

¹) The uncertainty covered by the CMC expressed as the standard measurement uncertainty multiplied by the coverage factor k such that the coverage probability corresponds to approximately 95 %.