EMV Labor
Anton Schuhwerk
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Prüfbericht
Nr. 2004011302

Prüfung gemäß der harmonisierten europäischen Norm EN 300 330-1:2001
V1.3.1

EUT: Digitaler Schließzylinder ELOCK2

Kunde: Sancak Sicherheitstechnik
Neckarstraße13
D-73728 Esslingen

Prüfort: EMV-Labor Schwarzwald-Baar-Heuberg
D- 78609 Tuningen

Prüfdatum: **01.02.2004**

Prüfer:

Dipl.-Ing. (FH)
A. Schuhwerk

Tuningen, 07.02.2004

1. Zusammenfassung der Prüfergebnisse

Art der Prüfung		Ergebnis
Transmitter parameter		
7.2.1 Transmitter carrier output levels	Seite 5	✓
7.3.1 Frequency error	Seite 6	✓
Spurious emissions conducted – Transmitter operating		☐
Spurious emissions conducted – Transmitter on Standby		☐
7.4.3 und 7.4.4 Radiated fiels strength Spurious emissions radiated – Transmitter operating	Seite 7/8	✓
Spurious emissions radiated – Transmitter on Standby		☐
Receiver parameters		
Spurious emissions conducted		☐
Spurious emissions radiated		☐

Applicationform for testing to EN 300 330-1	Seite 10	Anhang I
Technische Dokumentation		Anhang II

✓ Bestanden
X Nicht bestanden
☐ Nicht anwendbar für diese Produktart
--- Nicht geprüft

Das Gerät entspricht sämtlichen Anforderungen der Norm:

ETSI EN 300 330-1: 2001-06 (Product Class 1)

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2. Kunde

Name und Adresse des Kunden	Sancak Sicherheitstechnik Neckarstraße13 D-73728 Esslingen
Kontaktperson	Herr Dipl.-Ing. (FH) Ahmet Sancak
Telefon	0711 352722
Fax	0711 3508922
Email	info@elock2.com

3. Prüfling

Name und Adresse des Herstellers	Sancak Sicherheitstechnik Neckarstraße13 D-73728 Esslingen
Produktname	ELOCK2
Ursprungsland	Deutschland
Art des Produktes	Digitaler Schließzylinder
Seriennummer	-
Vor den Prüfungen angebrachte Änderungen	Keine
Technische Dokumentation	siehe Anhang II

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4. Testbedingungen

Temperatur:	22 – 24 °C
Relative Luftfeuchtigkeit:	38 – 46 %
Datum der Prüfung:	01.02.2004

5. Anwesende Personen

Prüfingenieur:	Dipl.Ing.(FH) Anton Schuhwerk	
Andere:	Name:	Firma:
	Herr Dipl.-Ing. (FH) Ahmet Sancak	Sancak Sicherheitstechnik

6. Funktion des Prüflings

Der Prüfling sendet/empfängt Informationen zu/von der passiven Transponderkarte und entriegelt bei Übereinstimmung mit der gespeicherten Schlüsselnummer sowie der gespeicherten Zeitzone(n) den Schließzylinder (Energie von interner 3.6V Batterie).

Der Transmitter (13.56MHz) wird durch einen Druck auf den Türknauf aktiviert. Nach Beendigung der Aktion (Entriegelung) wird wieder in den Sleepmode umgeschalten.

Die Hardware stellt eine Datenschnittstelle für Testzwecke zur Verfügung. Diese wird jedoch im Betrieb nicht benötigt.

7. Prüfbedingungen

Power supply:	3.6V (interne Li-Batterie)
Antenna type:	Integriert
Antenna connector:	fest verbunden mit Schaltung (Layout)
Remarks:	Für alle Tests (Abstrahlung) war der

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Transponder im Bereich des Feldes.

Ambient temperature **20** °C Relative humidity **38** %

H-FIELD (radiated) SUB-CLAUSE 7.2.1
(Class 1)

Rated field strength (maximum) **-10.1** dBµA/m
at 3 metres (very low radiation) Antenna size **0,00071** m^2

Test conditions		Transmitter field strength (dBµA/m)		
		CH 1	CH 2	CH 3
T_{nom}(**22**)°C	V_{nom}(**3.6**)V	**-10.1**		
Maximum deviation from rated output under normal test conditions (dB)				
Measurement uncertainty (dBµA/m)		**+/-3**		

LIMIT SUB-CLAUSE 7.2.1.3

Power Class	**Frequenzy range (MHz)**	**H-field strength limit (H_f) dBµA/m at 10m**
3	$0{,}009 \le f < 0{,}03$	72 or according to note
3	$0{,}03 \le f < 0{,}07$ $0{,}119 \le f < 0{,}135$	72MHz at 0,03 MHz descending 3dB/oct or according to note
2	$0{,}05975 \le f < 0{,}06025$ $0{,}07 \le f < 0{,}119$	42
4	$0{,}135 \le f < 1{,}0$	37,7MHz at 0,135MHz descending 3dB/oct
4	$1{,}0 \le f < 4{,}642$	29MHz at 1,0MHz descending 9dB/oct
5	$4{,}642 \le f < 30$	9
2 and 8	$6{,}765 \le f < 6{,}795$ $13{,}553 \le f < 13{,}567$ $26{,}957 \le f < 27{,}283$	42

Note: For the frequency ranges 9 to 70kHz and 119 to 135kHz, the following additional restrictions apply to the higher limits:
- for loop coil antennas with an area $\ge$ 0,16m^2 this table applies directly;
- for loop coil antennas with an area between 0,05m^2 and 0,16m^2 this table applies with a correction factor. The limit is: table value + 10 x log (area/o,16m^2);
- for loop coil antennas with an area < 0,05m^2 the limit is 10dB below this table.

Referenznummern der benutzten Prüfmittel (siehe Geräteliste)

21, 34, 35

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Ambient temperature **20** °C Relative humidity **38** %

PERMITTED FREQUENCY RANGE OF THE MODULATION BANDWIDTH
SUB-CLAUSE 7.3

Applicants declared operating frequency band:

Lowest frequency **13.56130** MHz Highest frequency **13.56141** MHz

Test conditions		Limit Frequency MHz
T_{nom}(**22**) °C	V_{min}(**3.0**) V	F **13.56139**
	V_{nom}(**3.6**) V	F **13.56140**
T_{min}(**-20**) °C	V_{nom} (**3.6**) V	F **13.56141**
T_{max}(**+55**) °C	V_{nom} (**3.6**) V	F **13.56130**
Measurement uncertainty Hz		+/- 100 Hz

F_L Lowest frequency at the appropriate spurious emission level
F_H Highest frequency at the appropriate spurious emission level
Band edge limits
F_{LM} = Lowest F_L (measured)
and
F_{HM} = Highest F_H (measured)

Referenznummern der benutzten Prüfmittel (siehe Geräteliste)
21,04,36

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Ambient temperature **20** °C Relative humidity **38** %

TRANSMITTER SPURIOUS EMISSIONS RADIATED (<30 MHz)
SUB-CLAUSE 7.4.3

Rated carrier output **-10.1** dBμA/m at 3m

Transmitter operating **X** Modulated **X**
standby Unmodulated

SPURIOUS EMISSIONS LEVEL (dBμA/m)								
CH 1			CH 2			CH 3		
f (MHz)	Bandwith** (kHz)	Level (dBμA/m)	f (MHz)	Bandwith** (kHz)	Level (dBμA/m)	f (MHz)	Bandwith** (kHz)	Level (dBμA/m)
27.12	**10**	**-24**						
Measurement uncertainty (dBμA/m)			**+/- 3**					

* carrier frequency
** Bandwith = the measuring receiver bandwith

LIMIT SUB-CLAUSE 7.4.3.2

State	**Frequency 9 kHz ≤ f < 10 MHz**	**Frequency 10 MHz ≤ f < 30 MHz**
Transmit	27 dBμA/m descending 3 dB/oct	-3,5 dBμA/m
Standby	6 dBμA/m descending 3 dB/oct	-24,5 dBμA/m

Referenznummern der benutzten Prüfmittel (siehe Geräteliste)

21, 04, 35

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Ambient temperature **20** °C Relative humidity **38** %

TRANSMITTER SPURIOUS EMISSIONS RADIATED (≥30 MHz)
SUB-CLAUSE 7.4.4

Rated carrier output **-10.1** dBµA/m at 3m

Transmitter operating **X** Modulated **X**
Standby Unmodulated

SPURIOUS EMISSIONS LEVEL (dBµA/m)								
CH 1			CH 2			CH 3		
f (MHz)	Bandwith** (kHz)	Level (nW)	f (MHz)	Bandwith** (kHz)	Level (dBµA/m)	f (MHz)	Bandwith** (kHz)	Level (dBµA/m)
40,68	**120**	**<1**						
54,24	**120**	**<1**						
67,76	**120**	**<0,1**						
Measurement uncertainty (dBµV)			**+/- 3**					

** Bandwith = the measuring receiver bandwith

LIMIT SUB-CLAUSE 7.4.4.2

State	47 MHz to 74 MHz 87,5 MHz to 118 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other Frequencies between 30 to 1000 MHz
Operating	4 nW	250 nW
Standby	2 nW	2 nW

Referenznummern der benutzten Prüfmittel (siehe Geräteliste)

01,02,06,07,08,31,35

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Verwendete Geräte und Ausrüstung:

01	EMI Test Receiver 20-1000 MHz **ESVS 10**		Ser.No.:841431/013	**Rohde & Schwarz**
02	Antenne 20 – 300 MHz **HK 116**		Ser.No.:841489/004	**Rohde & Schwarz**
03	Antenne 200 – 1300 MHz **HL 223**		Ser.No.:841516/008	**Rohde & Schwarz**
04	Aktive Rahmenantenne 9 kHz – 30 MHz **HFH 2-Z2**		Ser.No.:8331247/007	**Rohde & Schwarz**
05	Absorptionsmesszange 30 – 1000 MHz **AMZ 41**		Ser.No.:11644	**MEB Messelektronik Berlin**
06	Signalgenerator 9kHz – 1.040 GHz **SMY 01**		Ser.No.:843574/003	**Rohde & Schwarz**
07	Einkanal-Leistungsmesser **NRVS**		Ser.No.:842856/038	**Rohde & Schwarz**
08	Thermischer Leistungsmesskopf **NRV-Z51**		Ser.No.:841918/046	**Rohde & Schwarz**
09	Verstärker 80 – 1000 MHz **100W1000M1**		Ser.No.:18388	**emv**
10	Verstärker 10 kHz – 250 MHz **25A250A**		Ser.No.:18417	**emv**
11	Audio Generator 10 Hz – 1MHz **LAG - 27**		Ser.No.:4121599	**Leader Electronic Corp.**
12	Koppelzange 150 kHz – 230 MHz(1 GHz) **KEMZ - 801**		Ser.No.:12630	**MEB Messelektronik Berlin**
13	Dämpfungsglied 6dB/25W		Ser.No.:11631	**MEB Messelektronik Berlin**
14	Richtkoppler **RK100**		Ser.No.:12694	**MEB Messelektronik Berlin**
Koppelnetzwerke:	15	**AF2**	Ser.No.:11360	
	16	**M2**	Ser.No.:12061	
	17	**M3**	Ser.No.:12176	
	18	**S9**	Ser.No.:11290	
	19	**S25**	Ser.No.:11332	
	20	**T2**	Ser.No.:12445	**MEB Messelektronik Berlin**
21	EMI Test Receiver 9 kHz – 30 MHz **ESHS 10**		Ser.No.:842121/007	**Rohde & Schwarz**
22	Netznachbildung 9 kHz – 30 MHz **ESH2-Z5**		Ser.No.:842210/012	**Rohde & Schwarz**
Netzstromoberwellenanalysator und Flickermeter				
	23	**HIS 500**	Ser.No.:X71020	
	24	**ACS 500**	Ser.No.:HKS1921	
	25	**AIF 503**	Ser.No.:X71116	
	26	**DPA 503**	Ser.No.:0496-05	**EM Test**
27	Burst, Surge + Netzunterbruchsimulator UCS 500		Ser.No.:0296-36	**EM Test**
28	Burst Koppelstrecke 50 Ohm		---	**EM Test**
29	3 Phasen Koppelnetzwerk **CNI 503**		Ser.No.:1295-05	**EM Test**
30	ESD Generator **ESD 30** + ESD Pistole **P18**		Ser.No.:0296-58	**EM Test**
31	GTEM Zelle + Manipulator **GTEM2000**		Ser.No.:12743	**MEB Messelektronik Berlin**
32	Schirmkabine			**Jaquier EMC**
33	Stelltrafo **SA 101**			**SYN Electronic**
34	Magnet-Rahmenantenne (1mx1m)			
35	Halbwellendipol Typ VHA 9103 **30-300MHz**		Ser.Nr.: 30300-01	**Schwarzbeck**
36	Digitalthermometer **GTH 1200A**			**Greisinger**

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Anhang I

Applicationform for testing to ETSI EN 300 330-1

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Application form for testing to ETSI EN 300 330-1:2001

**Electromagnetic compatibility and Radio spectrum Matters (ERM);
Short Range Devices (SRD);
Radio equipment in the frequency range
9kHz to 25MHz and inductive loop systems
in the frequency range 9kHz to 30MHz;
Part 1: Technical characteristics and test methods**

Version : 01/2003

Adopted by EMV-Labor Schwarzwald-Baar-Heuberg:October 2003

EMV-Labor Schwarzwald-Baar-Heuberg,
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APPLICATION FORM FOR TESTING TO ETSI EN 300 330-1

The application form shall be used for equipment submitted for type testing in accordance with ETSI EN 300 330-1 intended for the transmission of alarms, identification, speech, telemetry, telecommand, etc., over a short range.

PLEASE READ THE FOLLOWING Notes:

Note (a)

More than one item of equipment may be required to be submitted for type testing where an equipment needs to be modified to provide connections to facilitate testing, i.e. measurements requiring direct connections to be made. In such cases a second un-modified equipment may be required for radiated i.e. case or cabinet radiation or ERP (effective radiated power) measurements to be performed.

Full details of modifications are to be provided, where applicable.

Note (b)

On non-harmonised parameters, national administrations may impose conditions on the type of modulation, channel/frequency separations, temperature range, maximum transmitter output power/effective radiated power, equipment marking and the inclusion of an automatic transmitter shut-off facility as a condition for the issue of an individual or general licence or as a condition for the use under licence exemption.

Manufacturers producing equipment to ETSI EN 300 330-1 may wish to offer an equipment of the same basic design in a number of different forms with different RF characteristics. This is subsequently referred to as a family of equipments. Each equipment in the family must be given a unique Type Designation.

In the case of equipment with different frequency ranges and channel separations, a separate set of test results will be required for each frequency range and each channel separation offered. In the case of equipment with different transmitter powers and temperature ranges, the procedures laid down in ETSI EN 300 330-1 permit use of a single set of test results.

Equipment with differing optional features

If an applicant wishes to obtain type approval, on the basis of a single set of test results for a family of equipments derived from the same basic design, where the equipments in the family have different operational features, such as audio output powers, which are not a requirement of ETSI EN 300 330-1, then the following considerations shall be observed.

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Any operational feature in hardware or software, which can effect any of the performance parameters (not including signalling), shall be clearly defined by the applicant at the time of application. This will enable the National Regulatory Authority to determine whether further testing is needed.

Note (c)

ACCESSORIES

It is the applicants responsibility when submitting equipment(s) to the test laboratory to provide appropriate connectors or alternative coupling arrangements to facilitate the connection of test equipment by the test laboratory to the equipment under test (E.U.T.). This should enable, if applicable:

i) access to the equipment RF output (transmitter);

ii) operation of the equipment to transmit (transmitter);

iii) access to the equipment modulator input;

iv) access to the analogue output of the RF part;

v) coupling arrangement (e.g. optical or acoustic coupling for equipment having no external audio connection);

vi) means of connecting the equipment to an external power supply.

vii) means of turning the modulation and signalling on/off.

Note (d)

For type approval to be granted on the basis of tests conducted on a pre-production model, that model must be manufactured to the same production drawings and manufacturer's specification as the later production models.

Where this is not the case the national regulatory authority reserves the right to require either partial or full type testing to be carried out on the final production models.

Note (e)

It is the applicant's responsibility to ensure that the equipment meets all the regulatory requirements for marking in the country where type approval is being sought.

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APPLICANT'S DETAILS	
CATEGORY OF APPLICANT (please tick relevant box opposite)	(a) ☒ MANUFACTURER (b) ☐ IMPORTER (c) ☐ DISTRIBUTOR (d) ☐ AGENT
COMPANY NAME	**Sancak Sicherheitstechnik**
ADDRESS	**Neckarstraße 13** **D-73728 Esslingen**
NAME FOR CONTACT PURPOSES	**Herr Dipl.-Ing. (FH) Sancak**
TELEPHONE No: **0711 352722** FAX No: **0711 3508922**	
TELEX No:	

If box (a) is ticked and the equipment is manufactured at a different address to that of the applicant, or if box (b), (c) or (d) is ticked, complete details in the box below with respect to the manufacturer.

MANUFACTURER'S DETAILS	
COMPANY NAME	.....
ADDRESS	.....**same as applicant**..... ....
NAME FOR CONTACT PURPOSES	.....
TELEPHONE No:	FAX No: .....
TELEX No:	

INTENDED USE (For information only)		
Details		
Product brochures included	☐ Yes	☒ No

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TYPE DESIGNATION
(See Note 1)

The type designation may be either a single alphanumeric code or an alphanumeric/code divided into two parts.

Please fill in

EITHER TYPE DESIGNATION AS A SINGLE ALPHANUMERIC CODE:

E	L	O	C	K	2														

OR TYPE DESIGNATION IN TWO PARTS:

1. EQUIPMENT SERIES No. (See Note 2)

2. EQUIPMENT SPECIFIC No. (See Note 3)

Note 1 This is the manufacturer's numeric or alphanumeric code or name that is specific to a particular equipment. It may contain information in coded form on the characteristics of the equipment e.g. frequency, power. The manufacturer is free to choose the form of the type designation.

Note 2 This is the number, code or trade name used by the manufacturer to describe a series or 'family' of equipment of substantially the same mechanical and electrical construction which will include a number of related equipments. This number is often referred to as the "model no.".

Note 3 This is the manufacturer's identification number given to a specific equipment in the series or 'family' of equipments. It is often referred to as the "identification number".

TYPE APPROVAL TO OTHER ETS

Has the equipment been previously type approved to any other ETS or I-ETS ?

Yes ☐ No ☒

If Yes please provide details of the previous type approval. (i.e. Type numbers, Dates, Issuing Authority, continue on separate sheet if required)

.....
.....

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EXTREME TEMPERATURE RANGE (over which equipment is to be type tested)		
☒	Category I (General)	-20 °C to +55 °C
☐	Category II (Portable)	-10 °C to +55 °C
☐	Category III (Equipment for normal indoor use)	0 °C to +55 °C

CONSTRUCTION OF EQUIPMENT

☒ Single unit (See Note 4)

☐ Multiple units

If multiple units describe each one clearly

Note 4 "UNIT" means a physically separate item of the equipment. The equipment under test may consist of two separate units. In this case additional sheets covering the transmitter and receiver characteristics for both units would be required, if unit 1 and unit 2 are covered by the same TYPE DESIGNATION.

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TYPE OF EQUIPMENT		
FIXED STATION		
☐ Transmitter	☒ Simplex	☒ Integral antenna
☐ Receiver	☐ Duplex	☐ Single antenna connector
☒ Transceiver		☐ Multiple antenna connectors No. .....
MOBILE STATION		
☐ Transmitter	☐ Simplex	☐ Integral antenna
☐ Receiver	☐ Duplex	☐ Single antenna connector
☐ Transceiver		☐ Multiple antenna connectors No. .....
☐ Remote Control Head		
PORTABLE STATION		
☐ Transmitter	☐ Simplex	☐ Integral antenna
☐ Receiver	☐ Duplex	☐ Single antenna connector
☐ Transceiver		☐ Multiple antenna connectors No. .....
☐ Battery charger		☐ Vehicle battery adaptor
TRANSPONDER (Tag)		
☐ Active		☒ Passive

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TRANSMITTER TECHNICAL CHARACTERISTICS
Product Class ..**1**..... (See ETSI 300 330-1 sub-clause 7.1.4)
ANTENNA CHARACTERISTICS
For Class 1 Equipments Average area for the loop ....**0.71x10^{-3}**.... m^2 (see Note 5)
For Class 2 and 3 Equipments Maximum current in the loop ..... Amps
FREQUENCY CHARACTERISTICS
Method of frequency generation ☒ CRYSTAL ☐ SYNTHESIZER ☐ OTHER .....
Transmitter frequency alignment range (see Note 6) .....**13.56MHz**.....
Transmitter channel switching frequency range (see Note 7) .....**-**.....
CHANNEL SEPARATION ..... **-**..... (if applicable) State the maximum number of channels over which the equipment can operate .... **-**.....

Note 5 The Area of the loop is the physical area and does not take into account the number of turns.

Note 6 The alignment range is the frequency range over which the receiver or the transmitter can be programmed and/or realigned to operate, without any physical change to components other than programmable read only memories or crystals (for the receiver or transmitter)

Note 7 The switching range is the maximum frequency range over which the receiver or the transmitter can be operated without reprogramming or realignment.

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TRANSMITTER RF CARRIER CHARACTERISTICS
MAXIMUM RATED TRANSMITTER OUTPUT .... Amps AT TRANSMITTER PERMANENT EXTERNAL RF OUTPUT CONNECTOR (FOR CLASS 2 OR 3 EQUIPMENT) or **-10.01** dB(µA/m) Field strength at 3m (FOR CLASS 1 EQUIPMENT WITH INTEGRAL ANTENNA) or .... dB(µA/m) Field strength at 10m (FOR CLASS 4 EQUIPMENT WITH INTEGRAL ANTENNA)
Is transmitter intended for: Continuous duty ☒ Yes ☐ No Intermittent duty only ☐ Yes ☒ No If intermittent duty state DUTY CYCLE Transmitter ON ..... seconds/minutes Transmitter OFF ..... seconds/minutes
Is transmitter carrier output variable? ☐ Yes ☒ No If Yes RF output Maximum ..... Minimum ..... Amps/dB(µA/m) Is the RF output continuously variable ☐ Yes ☐ No or stepped ☐ Yes ☐ No If stepped ..... dB per step

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TRANSMITTER - MODULATION	
☒ Amplitude ☐ Frequency ☐ Phase	☐ Other Details: .....

CLASS OF EMISSION	
ITU DESIGNATION	1: **10K0F1D** (see Note 8)
(if applicable)	2:
(if applicable)	3:
If more than three classes of emission, list separately	

TRANSMITTER MODULATION INPUT CHARACTERISTICS - ANALOGUE
(If applicable)

Frequency or Phase Modulation;
☐ for ≤ 12% of the channel separation at ..... Hz

Amplitude Modulation;
☐ for 60% modulation depth

or in the case that 60% modulation can not be achieved due to audio limiting, declare the maximum modulation depth

.....%

Modulation input signal level at:

Microphone socket	..... mV	Impedance ..... Ohms
Accessory socket	..... mV	Impedance ..... Ohms
Other (See Note 9)	..... mV	Impedance ..... Ohms

Lowest audio modulation frequency transmitted by the equipment

.....Hz

Note 8 As defined in the ITU Radio Regulations Article 4 and Appendix 6
Note 9 For use where direct connection is provided for test purposes.

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TRANSMITTER MODULATION INPUT CHARACTERISTICS - DIGITAL
(If applicable)

Modulation bit rate **10k**bit/s

Type of modulation:

SUBCARRIER:

MSK	☐	Yes	☒	No
FFSK	☐	Yes	☒	No

DIRECT:

Direct FSK	☐	Yes	☒	No
GMSK	☐	Yes	☒	No
Generalised Tamed FM	☐	Yes	☒	No
Multilevel State FM	☐	Yes	☒	No
PLL-4PSK	☐	Yes	☒	No
8 PSK	☐	Yes	☒	No

OTHER **ASK**.....

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INTERFACE FOR DATA TRANSMISSION (If applicable)
SIGNAL LEVEL ☐ V28 ☐ Other Details: ....
DEFINITION OF SIGNALS ☐ V24 ☐ Other Details: ....
NORMAL TEST SIGNAL
Can the equipment transmit continuous bit streams ☒ Yes ☐ No If No, give details of the format and information agreed with the National Regulatory Authority (sub-clause 6.1.2 of I-ETS 300 330 refers). Note: It is recommended that details of the agreed format are stated on the page of the type test report titled "Additional information supplementary to the test report".
TYPE OF CONNECTOR ☐ 25 Pin (RS232) ☐ 9 Pin (RS232) ☐ Male ☐ Female ☐ Other Details: ....

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RECEIVER TECHNICAL CHARACTERISTICS
FREQUENCY CHARACTERISTICS
Receiver frequency alignment range (see Note 6) .....**13.56MHz**..... Receiver channel switching frequency range (see Note 7) .....**-**.....
CHANNEL SEPARATION .....**-**..... (If applicable) State the maximum number of channels over which the equipment can operate .....**-**.....
CLASS OF EMISSION USED
ITU DESIGNATION 1: (see Note 8) **10K0F1D** (if applicable) 2: (if applicable) 3: If more than three classes of emission, list separately

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POWER SOURCE(S)

☐ AC SUPPLY ..... State voltage ☐ Single phase

..... AC SUPPLY FREQUENCY (Hz) ☐ Three phase

AND/OR

☐ EXTERNAL DC SUPPLY

Nominal voltage **3.6V** Extreme upper voltage **3.6V**

Extreme lower voltage **3.0V**

BATTERY

☐ Nickel Cadmium

☐ Lead acid

☐ Leclanché

☒ Lithium

☐ Other Details: .....

Extreme test voltages ..... DC (V)

..... Nominal DC Voltage (V)

..... DC Maximum Current (A)

AUTOMATIC EQUIPMENT SWITCH OFF

If the equipment is designed to automatically switch off at a predetermined voltage level which is higher or lower in value than the battery minimum voltage calculated values this shall be clearly stated.

☐ Applies ..... Cut-off voltage

☒ Does not apply

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DUPLEX OPERATION

Is the equipment intended for

Duplex operation ☐ Yes

☒ No

Is the equipment fitted with separate transmitter and receiver antenna sockets

☐ Yes

☒ No

Is the equipment fitted with a duplex filter as an integral part of the equipment with a single antenna connection socket

☐ Yes

☒ No

Is the duplex filter externally fitted and connected to the main equipment by co-axial cable(s)

☐ Yes

☒ No

If Yes state type and make of duplex filter

.....

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FREQUENCY IDENTIFICATION

Each equipment, whether one or more submitted for tests shall carry clear identification (such as a serial number), together with the frequency identification displayed on the equipment.

Equipment identification e.g. serial number	Channel No. (if applicable)	Transmit Nominal Frequency (MHz)	Receive Nominal Frequency (MHz)
ELOCK2	**-**	**13.56**	**13.56**

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OTHER ITEMS SUPPLIED				
Spare batteries e.g. (portable equipment)	☐	Yes	☒	No
Battery charging device	☐	Yes	☒	No
Special tools for dismantling equipment	☐	Yes	☒	No
Encoder/Decoder	☐	Yes	☒	No
Test fixture (if applicable)	☐	Yes	☒	No
Full equipment documentation:				
Operating instructions	☐	Yes	☒	No
User manual	☐	Yes	☒	No
Circuit diagrams	☒	Yes	☐	No
P.C. board layout, including component positioning	☒	Yes	☐	No
Parts list	☒	Yes	☐	No
Other	☐	Yes	☒	No
If Yes, please specify				
.....				

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DECLARATION

Are the equipments submitted representative production models?

☒ Yes ☐ No

If not are the equipments pre-production models?

☐ Yes ☐ No

If pre-production equipments are submitted will the final production equipments be identical in all respects with the equipment tested

☐ Yes ☐ No

If no, supply full details of differences:

.....

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Anhang II

Technische Dokumentation

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