

CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

ISERT (PTY) LTD

Co. Reg. No.: 2017/186396/07

Facility Accreditation Number: **T0812**

is a South African National Accreditation System accredited facility
provided that all conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation,
Annexure "A", bearing the above accreditation number for

**ELECTRO MAGNETIC COMPATIBILITY & RADIO EQUIPMENT
TESTING**

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2005

The accreditation demonstrates technical competency for a defined scope and the operation of a
quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to
use the relevant accreditation symbol to issue facility reports and/or certificates

Mr R Josias

Chief Executive Officer

Effective Date: 24 November 2017
Certificate Expires: 23 November 2022

ANNEXURE A
SCHEDULE OF ACCREDITATION

Facility Number: **T0812**

Permanent Address of Laboratory:

iSert (Pty) Ltd
129 Khai-Apple Street
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Postal Address:

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Lyttleton
0140

Tel: (012) 548 0940**Fax:****E-mail:** johan@isert.co.za**Technical Signatories:**

Mr CJ Deysel (EMC)
Mr RM van den Berg (RF)

Nominated Representative:

Mr CJ Deysel

Issue No.: 02**Date of Issue:** 24 August 2018**Expiry Date:** 23 November 2022

Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Techniques / Equipment Used
EMC Product standards		
Industrial, Scientific and Medical Equipment	Electromagnetic disturbance characteristics	SANS 211:2011 / CISPR 11:2010, A1:2010 / EN 55011: 2010 (single phase only)
Electromagnetic compatibility requirements for household appliances, electric tools and similar apparatus	Electromagnetic compatibility – appliances, electric tools and similar apparatus Part 1: Emissions	SANS 214-1:2012, CISPR 14-1:2011/EN 55014-1:2017
	Electromagnetic compatibility – requirements for household appliances, electric tools and similar apparatus – Part 2: Immunity	SANS 214-2:2009, EN 55014-2:2015, CISPR 14-2:2008 (I/P current 15 A max)
Information Technology Equipment (ITE)	Information technology equipment - Radio disturbance characteristics- Limits and methods of measurement	SANS 222:2009 / CISPR 22:2008 / EN 55022 :2010
	Information technology equipment- Immunity characteristics-Limits and methods of measurement	SANS 224:2009 / CISPR 24:2008 / EN 55024 :2008
Multimedia Equipment (MME)	Electromagnetic compatibility of multimedia equipment- Emission requirements	CISPR 32: 2015 / EN 55032: 2015
	Electromagnetic compatibility of multimedia equipment- Immunity Requirements	CISPR 35: 2016 / EN 55035: 2015
Radio Equipment Directive	Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements	ETSI EN 301 489-1

Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz	ETSI EN 301 489-3
Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS)	ETSI EN 301 489-7
Specific conditions for Broadband Data Transmission Systems	ETSI EN 301 489-17
Specific conditions for IMT-2000 CDMA Direct Spread (UTRA) for Mobile and portable (UE) radio and ancillary equipment	ETSI EN 301 489-24

EMC Basic standards

Electrical Equipment connected to Public Low-Voltage Systems	Harmonic current emissions	SANS 61000-3-2:2009 / IEC 61000-3-2:2014 / EN 61000-3-2:2014
	Voltage changes, voltage fluctuations and flicker	SANS 61000-3-3:2009 / IEC 61000-3-3:2013 / EN 61000-3-3:2008
	Electrostatic immunity	SANS 61000-4-2:2009 / IEC 61000-4-2:2008 / EN 61000-4-2:2009
	Radiated, radio-frequency, electromagnets field immunity test	SANS 61000-4-3 2008 / IEC 61000-4-3: 2006+A1:2007+A2:2010/ EN 61000-4-3: 2006+A2:2010
	Electrical fast transient / burst immunity	SANS 61000-4-4:2011 / IEC 61000-4-4:2012 / EN 61000-4-4:2012
	Surge immunity	SANS 61000-4-5:2006 / IEC 61000-4-5:2014 / EN 61000-4-5:2014
	Immunity to conducted disturbances, induced by radio-frequency fields	SANS 61000-4-6:2009 / IEC 61000-4-6:2013 / EN 61000-4-6:2014
	Power frequency electric field immunity test	SANS 61000-4-8: 2009 / IEC 61000-4-8:2009/ EN 61000-4-8:2010
	Pulse magnet field immunity test	SANS 61000-4-9: 2003 / IEC 61000-4-9:2016/ EN 61000-4-9:2016
	Immunity to voltage dips, short interruptions and voltage variations	SANS 61000-4-11:2005 / IEC 61000-4-11: 2004+A1:2017 / EN 61000-4-11:2004

RF Standards

Harmonised standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU;	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz;	ETSI EN 300 220-1 & ETSI EN 300 220-2
	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques;	ETSI EN 300 328
	Global System for Mobile communications (GSM); Mobile Stations (MS) equipment;	ETSI EN 301 511 only for section 4.2.5, 4.2.16 & 4.2.17
	IMT cellular networks; CDMA Direct Spread (UTRA FDD) User Equipment (UE)	ETSI EN 301 908-1, ETSI EN 301 908-2
	Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range;	ETSI EN 300 440
	Short Range Devices (SRD); Radio equipment in the frequency range 9 KHz to 25 MHz and inductive loop systems in the frequency range 9 KHz to 30 MHz; Harmonised standard covering the essential requirements of article 3.2 of Directive 2014/53/EN	ETSI EN 300 330 V2.1.1 (2017-02)
	Fixed Radio Systems; characteristics and requirements for point-to-point equipment and antennas; Part 2-2: Digital systems operating in frequency bands where frequency co-ordination is applied; Harmonized EN covering the essential requirements of article 3.2 of the R & TTE Directive	ETSI EN 302 217-2 V3.1.1 (2017-05)
Energy Efficiency	Energy efficiency of electronic apparatus	SANS 941:2014
	Methods of measurement for the power consumption of audits, video and related equipment	IEC 62087-1:2017

Original Date of Accreditation: 24 November 2017

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Accreditation Manager