



**47 CFR PART 15 TEST SETUP PHOTOGRAPHS OF AN  
INDUCTIVE CARD READER,  
BRAND INTEGRATED ENGINEERING,  
MODEL SMARTREADER  
FCC ID P4E-SMARTPIN-1**

FCC listed : 90828  
Industry Canada : IC3501  
VCCI registered : R-1518, C-1598

**TNO Electronic Products & Services (EPS) B.V.  
P.O. Box 15  
9822 ZG Niekerk (NL)  
Smidshornerweg 18  
9822 TL Niekerk (NL)**

Telephone: +31 594 505005  
Telefax: +31 594 504804

E-mail: [info@eps.tno.nl](mailto:info@eps.tno.nl)  
Web: [www.eps.tno.nl](http://www.eps.tno.nl)



Description of EUT: Inductive card reader  
Manufacturer: Integrated Engineering B.V.  
Brand mark: Integrated Engineering  
Model: Smartreader  
FCC ID: P4E-SMARTPIN-1

---

### **Description of test item**

Test item	:	Inductive card reader operating on 13.56 MHz
Manufacturer	:	Integrated Engineering B.V.
Brand	:	Integrated Engineering
Model (s)	:	Smartreader

### **Applicant information**

Applicant's representative	:	Mr. R.J. Holslag
Company	:	Integrated Engineering B.V.
Address	:	Paasheuvelsweg 20
Postal code	:	1105 BJ
City	:	Amsterdam
PO-box	:	n.a.
Postal code	:	n.a.
City	:	n.a.
Country	:	The Netherlands
Telephone number	:	+ 31 (0)20 46 20 755
Telefax number	:	+ 31 (0)20 46 20 756
Website address	:	www.smart-ID.com

This report is in conformity with NEN-EN-ISO/IEC 17025: 2000.

This report shall not be reproduced, except in full, without the written permission of TNO Electronic Products & Services (EPS) B.V.  
The test results relate only to the item(s) tested.



**Description of EUT:** Inductive card reader  
**Manufacturer:** Integrated Engineering B.V.  
**Brand mark:** Integrated Engineering  
**Model:** Smartreader  
**FCC ID:** P4E-SMARTPIN-1

---

## **Table of contents**

1	Test setup photographs of radiated emission measurements. ....	4
2	Test setup photographs of conducted emission measurements.....	7



Description of EUT:	Inductive card reader
Manufacturer:	Integrated Engineering B.V.
Brand mark:	Integrated Engineering
Model:	Smartreader
FCC ID:	P4E-SMARTPIN-1

---

## **1 Test setup photographs of radiated emission measurements.**

**Photo 1: Radiated emission; front side view**

**Photo 2: radiated emission measurement set up; back side view.**





## 2 Test setup photographs of conducted emission measurements



Photo 3: Conducted emission measurement set up



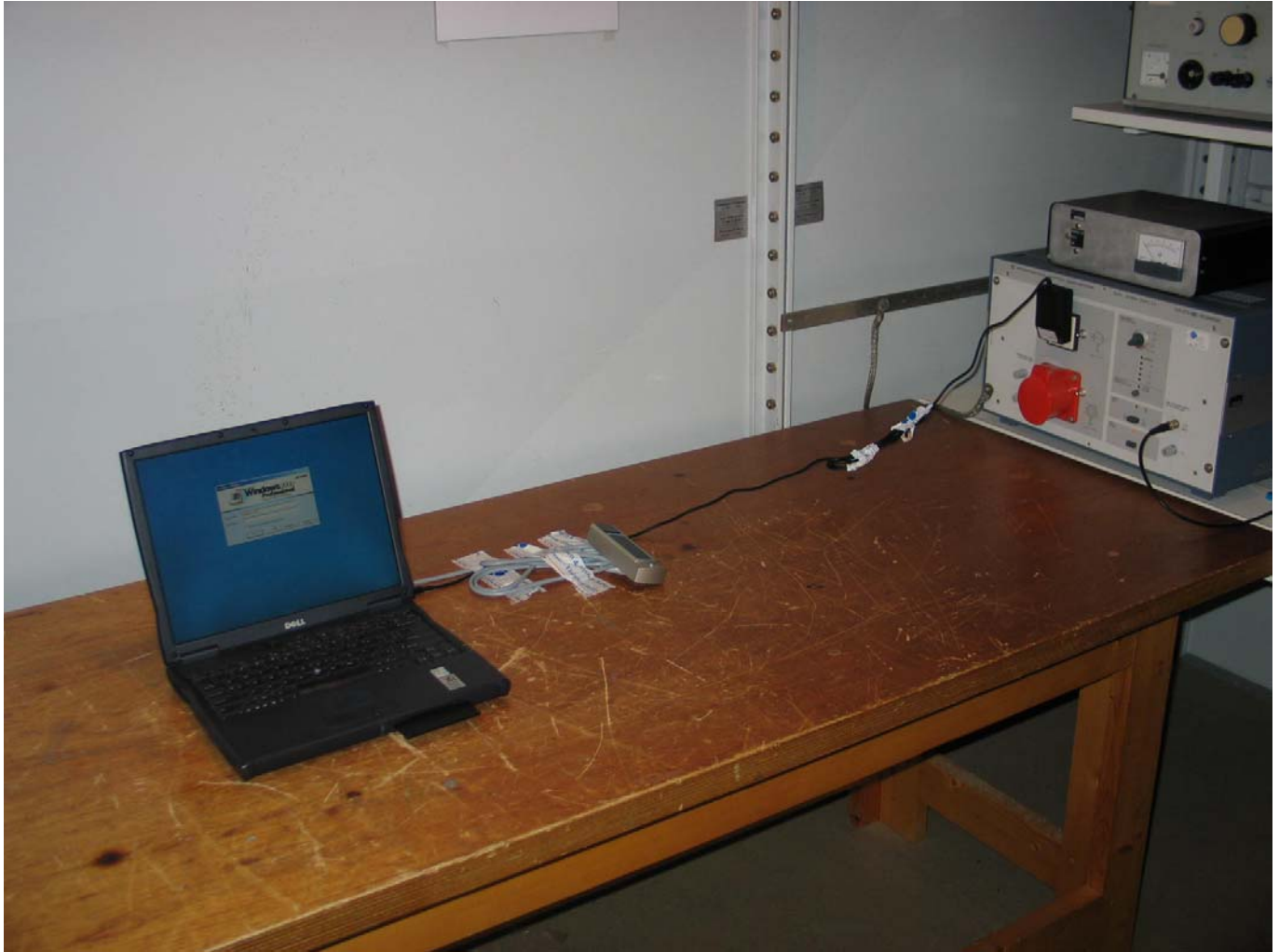


Photo 4 conducted emission measurement set up