#### TÜV Rheinland Nederland B.V.



Eiberkamp 10 9351VT Leek The Netherlands

www.tuv.com/nl

T +31 594 505005 F +31 594 504804 E eps@nl.tuv.com

Subject Modular Approval

**Certification Department** 6731 Whittier Avenue, Suite C110 McLean, Virginia 22101

To whom it may concern,

ACB

USA

On behalf of our customer INID BV, we hereby would like to apply for a Limited (Single) Modular Approval for the following device:

FCC ID : YAB-NGRPAOLFA IC : 8908A-NGRPAOLFA

Brand : INID Model : 4000A

Description: An Inductive Proximity Card Reader add-on module

operating in the range 115 - 148 kHz.

See following page for the details of the host of which this application applies. The module is limited in the following items:

This modular transmitter does not comply with the requirements in Section 15.212(a)(1) of the FCC Rules and for Industry Canada RSP-100, Issue 10, section 7.3. it deviates on the following subsections:

- It does not have RF shielding, it is a LF application and it wouldn't be practical to implement a RF shielding because that would make operation of the whole device impossible. Highest frequency that occur on the module can be 592 kHz, a clock signal from the host device.
- Depends on power supply by the host. A regulated power supply of 5V and 3.3V is required. 1.8V is generated from the 3.3V supply by an onboard linear LDO regulator.
- Can not be tested in Stand Alone configuration, it requires the host which has been certified with:
  - FCC ID: YAB-ISOACRDR IC: 8908A-ISOACRDR.
- Limited in use to the host mentioned on the following page (attestation)

The installation manual states that the installation procedure is only allowed for trained and authorized personnel by INID BV. All other requirements are met.

Best regards,

TÜV Rheinland Nederland B.V.

R .van der Meer Test Engineer

The <u>INID ISO14443</u> reader product family consists of different models that incorporate an identical main PWA (**NGRP-AC**) that has integral: Power Section, I/O Section, Digital Processing Section, RF Section and Antenna. The main PWA has an integral RF amplifier and optional integral keyboard. The integral I/O Section of the main PWA is equipped



with one out of four possible interfaces, a special model has two interfaces that are software selectable. This main board is then placed within different plastic enclosures that do not impact compliance for Safety, Radio, Emissions and immunity requirements. In addition, other PWA's may be added to the main PWA integral to the plastic enclosure to add functionality to the device (e.g. a SAM interface, 125kHz proximity reader module, biometrics). In cases where the basic geometries may affect compliance, prescans are performed in order to identify the worst case model. All Engineering justifications and/or compliance impacts are addressed within the report in the form of additional testing and/or notes.

The **INID MultiSmart** reader product family consists of different models that incorporate the 50XX INID ISO14443 reader (FCC ID: YAB-ISOACRDR / IC: 8908A-ISOACRDR) and the 4000A NGRP AOLF add-on module (FCC ID: YAB-NGRPAOLFA / IC: 8908A-NGRPAOLFA).

### - Model 50XX -

Reader Type #1 - Mullion with Keypad - 13.56MHz Reader with RF amplifier								
Model number	Enclosure	Main PWA	RF amp	Keyboard	WG C&D TTL	RS485 RS422	RS232	PWA #2
5040	Plastic	NGRP-AC	Υ	Υ	Υ	_	-	N/A
5040A	Plastic	NGRP-AC	Y	Y	software	selected	-	N/A
5050	Plastic	NGRP-AC	Υ	Υ	-	Υ	-	N/A
5060	Plastic	NGRP-AC	Y	Y	-	-	Υ	N/A
<b>Differences</b> These models only differ in the integral I/O section on the PWA.								

Reader Type #2 - Mullion - 13.56MHz Reader with RF amplifier									
<b>Model number</b>	<b>Enclosure</b>	Main PWA	RF amp	Keyboard	WG C&D TTL	RS485 RS422	RS232	PWA #2	
5000	Plastic	NGRP-AC	Υ	1	Υ	-	-	N/A	
5000A	Plastic	NGRP-AC	Υ	-	software	selected	-	N/A	
5010	Plastic	NGRP-AC	Υ	-	-	Υ	-	N/A	
5020	Plastic	NGRP-AC	Υ	-	-	-	Υ	N/A	
1. These models only differ in the integral I/O section on the PWA.									
Differences	2. The only difference with <b>reader type #1</b> is the absence of the keyboard.								

# Reader Type #3 - Mullion with Keypad - 13.56MHz Reader with RF amplifier and LF proximity Reader

Model number	Enclosure	Main PWA	RF amp	Keyboard	WG C&D TTL	RS485 RS422	RS232	PWA #2
5045B	Plastic	5040	Υ	Υ	Υ	_	-	4000A
5045H	Plastic	5040A	Υ	Υ	software	selected	-	4000A
5055B	Plastic	5050	Υ	Υ	_	Υ	-	4000A
5065H	Plastic	5060	Υ	Y	-	-	Υ	4000A
<b>Differences</b> These models only differ in the integral I/O section on the PWA.								

## Reader Type #4 - Mullion - 13.56MHz Reader with RF amplifier and LF proximity Reader

Model number	Enclosure	Main PWA	RF amp	Keyboard	WG C&D TTL	RS485 RS422	RS232	PWA #2	
5005B	Plastic	5000	Υ	_	Υ	-	-	4000A	
5005H	Plastic	5000A	Υ	-	software	selected	-	4000A	
5015B	Plastic	5010	Υ	-	-	Υ	-	4000A	
5025H	Plastic	5020	Υ	-	-	-	Υ	4000A	
Differences 1. These models only differ in the integral I/O section on the PWA.									
Differences	2. The only difference with <b>reader type #3</b> is the absence of the keyboard.								

Overweg 5 1713 HX Obdam The Netherlands T: +31 (0)226 450 009 F: +31 (0)226 450 030

E: info@inid-readers.com

Rabobank: 1401.76.691 IBAN: NL11 RABO 0140 176691 SWIFT/BIC: RABONL2U

C.of C.: KvK - 20158413

VAT: NL8211.34.589.B01 www.inid-readers.com

Supporting product photos are on the following pages, under the signature below



Mag las

Company Representative Signature: Mark de Olde / Chief Technical Officer May 28<sup>th</sup>, 2015

Statement date:



### **Product photos**



left: INID ISO14443 reader

(models: 5000, 5000A, 5005B, 5005H, 5010, 5015B, 5020, 5025H)

right: INID ISO14443 PIN reader

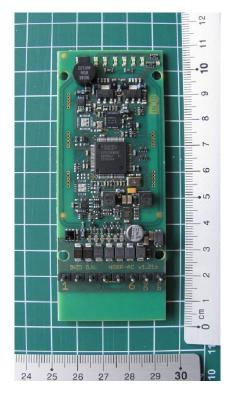
(models: 5040, 5040A, 5045B, 5045H, 5050, 5055B, 5060, 5065H)

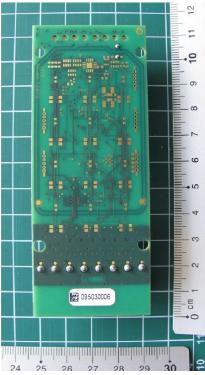
left: INID ISO14443 reader (model 5000A shown), connector side

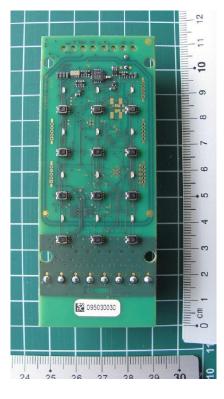
middle: INID ISO14443 reader (all models), keyboard side without keyboard.











left: INID MultiSmart reader (all models) with 4000A NGRP-AOLF module, connector side

middle: 4000A NGRP-AOLF module, component side right: 4000A NGRP-AOLF module, antenna side



