

# Multi standard Proximity reader line

Reader Code	KITNLO**	RWOSS	RWEMB	RWBLUE
<b>Supported protocols</b>				
ISO 15693	x	x	x	x
ISO 14443 A & B	x	x	x	x
Mifare Classic encryption	x	x	x	x
<b>Communication ports</b>				
USB port	x	x		
UART TTL port			x	
RS 232 port		DB9 / 3-pin	3-pin	DB9 / 3-pin
Bluetooth				x (optional. Up to 10 m)
<b>Antenna options</b>				
Integrated antenna	x		x	
External 50 Ω antenna (long cable: 2-3 m)		x		x
Ext. directly matched antenna (short cable: < 10 cm)				x
Antenna connector		<ul style="list-style-type: none"> <li>on board 2 pin</li> <li>BNC</li> <li>SMA (option)</li> </ul>		Mutual exclusive options: <ul style="list-style-type: none"> <li>On board 6-pin (directly matched)</li> <li>BNC (50 Ω antenna)</li> </ul>
RF Power	Up to 150 mW *	Up to 360 mW *		
Max. reading distance (cm) *				
ISO 15693	15	18	12	20
ISO 14443	8	10	7	10
<b>Firmware features</b>				
Anticollision	x	x	x	x
Host controlled mode	x	x	x	x
Auto-Scan mode	x	x	x	x
Tag Event mode	x	x	x	x
Write-Only Mifare security keys	32	32	32	32
Upgradeable firmware	x	x	x	x
Real Time Clock				x
Microcontroller	32 KB Flash, 1 KB EEPROM, 2 KB SRAM	32 KB Flash, 1 KB EEPROM, 2 KB SRAM	32 KB Flash, 1 KB EEPROM, 2 KB SRAM	128 KB Flash, 4 KB EEPROM, 4 KB SRAM
<b>Input / output features</b>				
Buzzer on board	x	x		x
LED on board	<ul style="list-style-type: none"> <li>1 power</li> <li>1 general purpose</li> <li>2 USB rx/tx</li> </ul>	<ul style="list-style-type: none"> <li>1 power</li> <li>1 general purpose</li> <li>2 USB rx/tx</li> </ul>		<ul style="list-style-type: none"> <li>1 bi-colour general purpose</li> <li>1 battery charge monitor</li> </ul>
Inputs / Outputs			Optional: <ul style="list-style-type: none"> <li>8 digital unprotected I/O</li> <li>1 digital I/O + GND + Power</li> </ul>	<ul style="list-style-type: none"> <li>8 protected outputs</li> <li>4 protected inputs</li> <li>optionally 4 outputs can be used as non-protected I/O</li> </ul>
<b>Power supply and consumption</b>				
Power supply	USB powered	<ul style="list-style-type: none"> <li>USB powered</li> <li>+12V</li> </ul>	<ul style="list-style-type: none"> <li>Stabilized +5V (analog section)</li> <li>+3/+5 V (digital section)</li> </ul>	<ul style="list-style-type: none"> <li>Stabilized +5V</li> <li>3.7V Li-Ion battery</li> </ul>
Power connector		<ul style="list-style-type: none"> <li>USB</li> <li>DC jack</li> </ul>	Strip line	<ul style="list-style-type: none"> <li>2-pin strip line (+/-)</li> <li>DC jack</li> <li>3/4 pin battery strip line</li> </ul>
Power switch connector				x
Battery charge management				x
Current consumption	~200 mA (active RF) *	~ 200 mA (active RF) *	~ 70 mA (active RF) * ~ 100 µA (Low power mode) *	~ 150 mA (active RF and Bluetooth) Up to 800 mA if RF is on and battery is recharging
<b>Dimensions (mm)</b>	Boxed: 150 x 135 x 37	143 x 48 (max)	76 x 70	110 x 60
<b>Applications</b>	Desktop applications (office, item tracking)	Industrial applications	Low-cost, low-power, OEM applications	Portable wireless devices, stand-alone applications, Wide FLASH and RAM space for customized applications

