

INSTALACIÓN  
INSTALLATION  
INSTALAÇÃO  
INSTALLATION  
INSTALLAZIONE  
安装  
取り付け  
설치  
УСТАНОВКА

# iCLASS®

13.56 MHz Contactless

## INSTALLATION GUIDE

**Hi-O Technology Reader**

**R10 • R15 • R30 • R40 • RK40**



**ACCESS flexibility.**



3170-901 B.0

# Parts List

COMPONENTES  
PIÈCES  
PEÇAS  
KOMPONENTEN

COMPONENTI  
部件列表  
部品  
부품  
КОМПЛЕКТАЦИЯ

## PARTS

- 1 - iCLASS Reader
- 1 - Installation Manual
- 2 - 3.5 mm x .6 pitch x 12 mm Phillips machine screws
- 3 - #6-32 x .375" Phillips self-tapping (mv) machine screws
- 2 - #6 x 1.5" Phillips sheet metal screws
- 1 - #6 x .375" Spanner security screw, anti-tamper
- 2 - Terminal connectors for terminal readers
- 1 - Base plate
- 1 - Mounting Gasket (Keypad)

### Recommended

- Up to 4 wire splices (pigtail)
- Cable, 4 conductor, 22 or 24 AWG [.65 mm or .51 mm]
- Linear DC Power supply
- Metal or plastic junction box
- Security Tool (for anti-tamper screw) HID 04-0001-03

## LISTA DE COMPONENTES

- 1 lector iCLASS
- 1 manual de instalación
- 2 tornillos mecánicos Phillips de 3.5 mm x 12 mm, paso 0.6
- 3 tornillos mecánicos autoperforantes N.º 6 de 32 x 0.375"
- 2 tornillos Phillips N.º 6 para metales de 1.5"
- 1 tornillo de seguridad N.º 6 contra sabotaje de 0.375" para llave inglesa
- 2 conectores de borne para lectores de borne
- 1 placa base
- 1 guarnición de montaje (Teclado)

### Recomendado:

- Un máximo de 4 empalmes para cable (flexible)
- Cable, de 4 conductores, 22 o 24 AWG [.65 mm o .51 mm]
- Fuente de alimentación lineal de CC
- Caja metálica o de plástico para conexiones
- Herramienta de seguridad (para tornillo contra sabotaje) HID 04-0001-03

## LISTE DES PIÈCES

- 1 - Lecteur iCLASS
- 1 - Manuel d'installation
- 2 - Vis mécaniques cruciformes 3,5 mm x 0,6 pas x 12 mm
- 3 - Vis mécaniques cruciformes autotaraudeuses N° 6-32 x 0,375 pouce
- 2 - Vis à tête cruciformes N° 6 x 1,5 pouce
- 1 - Vis de sécurité inviolable N° 6 x 0,375 pouce
- 2 - Connecteurs de bornier pour lecteurs à bornier
- 1 - Support
- 1 - Joint plat (Clavier)

### Recommandés

- Jusqu'à 4 embouts de câble (en tire-bouchon)
- Câble, 4 conducteurs, 22 ou 24 AWG [.65 mm ou .51 mm]
- Alimentation cc linéaire
- Boîtier de jonction métallique ou plastique
- Outil de sécurité (pour vis inviolable) HID 04-0001-03

## 部件列表

- 1 - iCLASS 读卡机
- 1 - 安装手册
- 2 - 3.5 mm x .6 螺距 x 12 mm Phillips 机制螺钉
- 3 - #6-32 x .375" Phillips 自攻 (mv) 机制螺钉
- 2 - #6 x 1.5" Phillips 小螺钉
- 1 - #6 x .375" 扳手安全螺钉, 防撬
- 2 - 终端读卡机的终端接头
- 1 - 底板
- 1 - 安装垫片 (键盘)

### 推荐

- 最多 4 个接线头 (绞编)
- 电缆, 4 导线, 22 或 24 AWG [.65 mm 或 .51 mm]
- 线性直流电源
- 金属或塑料接线盒
- 安全工具 (用于防撬螺钉) HID 04-0001-03

## LISTA DE PEÇAS

- 1 - Leitor iCLASS
- 1 - Manual de instalação
- 2 - Parafusos Phillips para aplicação a máquina de 3,5 mm x de passo 0,6 x 12 mm
- 3 - Parafusos Phillips de auto-rosqueamento para aplicação a máquina n° 6-32 x 0,375 pol.
- 2 - Parafusos Phillips de chapa metálica n° 6 x 1,5 pol.
- 1 - Parafuso de segurança de chave de porca n° 6 x 0,375 pol., antivolação
- 2 - Conectores do terminal para os leitores do terminal.
- 1 - Placa básica
- 1 - Vedação de montagem (Teclado)

### Recomendado

- Entrelaçamentos de até 4 cabos (cabo flexível)
- Cabo, condutor 4, 22 ou 24 AWG [65 mm ou 51 mm]
- Alimentação DC linear
- Caixa de junção de metal ou plástico
- Ferramenta de segurança (para o parafuso antivolação) HID 04-0001-03

## KOMPONENTEN

- 1 iCLASS Leser
- 1 Installationsanleitung
- 2 Kreuzschlitzschrauben – 3,5 mm x 12 mm (x 0,6 Zoll Teilung)
- 3 Kreuzschlitz-Schneidschrauben – US-Größe Nr. 6-32 x 0,375 Zoll
- 2 Kreuzschlitz-Blechschräuben – US-Größe Nr. 6 x 1,5 Zoll
- 1 Sicherungsschraube – US-Größe Nr. 6 x 0,375 Zoll
- 2 Anschlussstecker für Leser
- 1 Grundplatte
- 1 Montagedichtung (Tastatur)

### Empfohlene Komponenten

- Bis zu 4 Spießverbindungen
- Kabel, 4 Leiter, 22 oder 24 AWG [.65 mm oder .51 mm]
- Lineares Gleichstromnetzteil
- Verteilerkasten aus Metall oder Kunststoff
- Sicherungswerkzeug (für Sicherungsschraube) HID 04-0001-03

## ELENCO PARTI

- Un lettore iCLASS
- Un manuale di installazione
- Due viti da ferro Phillips da 3,5 mm x 12 mm con passo da 0,6
- Viti da ferro autofilettanti Phillips numero # 6 32 x 0,375 pollici
- Due viti per lamiera Phillips numero 6 x 1,5 pollici
- Una vite di sicurezza antimanomissione Spanner numero 6 x 0,375 pollici
- Due morsettiere per terminali lettore
- Una piastra di base
- Una guarnizione per montaggio (Tastiera)

### Consigliati

- Cavo a quattro poli
- Cavo, conduttore 4, schermato 22 o 24 AWG [.65 mm o .51 mm]
- Alimentatore lineare c.c.
- Scatola di giunzione metallica o in plastica
- Utensile di sicurezza (per viti antimanomissione) HID 04-0001-03



## 部品リスト

- 1 - iCLASSリーダー
- 1 - 取り付けマニュアル
- 2 - 3.5 mm x .6 ピッチ x 12 mm プラス小ねじ
- 3 - #6-32 x .375" セルフ タッピング(mv)プラス小ねじ
- 2 - #6 x 1.5" 板金プラスねじ
- 1 - #6 x .375" スパナ用セキュリティ ティねじ, 不正開封防止
- 2 - ターミナル リーダ用ターミナル コネクタ
- 1 - ベースプレート
- 1 - 取り付けガasket (キーパッド)

### 推奨

- 最大 4 のワイヤスプライス(ビグテール)
- ケーブル, 4芯, 22または24 AWG [.65 mmまたは.51 mm]
- リニア DC 電源
- 金属製またはプラスチック製接続 ボックス
- セキュリティツール (不正開封 防止ねじ用)HID 04-0001-03

## 부품

- 1 - iCLASS 리더기
- 1 - 설치 매뉴얼
- 2 - 3.5 mm x 0.6 피치 x 12 mm (+)형 기계용 나사
- 3 - #6-32 x 0.375인치 (+)형 자동 탭 기계 용 나사
- 2 - #6 x 1.5인치 (+)형 판금 나사
- 1 - #6 x 0.375인치 스패너 안전 나사, 안티-탬퍼
- 2 - 터미널 리더용 터미널 커넥터
- 1 - 베이스 플레이트
- 1 - 설치 개스킷 (키패드)

### 권장 사항

- 최대 4개의 라인 케이블 (Pigtail)
- 케이블, 4 커넥터, 22 또는 24 AWG [.65 mm 또는 .51 mm]
- Linear DC 전원 공급장치
- 금속 또는 플라스틱 결합 박스
- 보안 톨 (안티-탬퍼용 나사) HID 04-0001-03

## Комплектация

- 1 считыватель (карт-ридер) iCLASS
- 1 руководство по монтажу
- 2 винта 3,5 мм x 0,6 x 12 мм с крестообразным шлицем
- 3 винта-самореза #6-32 x 0,375" с крестообразным шлицем
- 2 шурупа по жести № 6 x 1,5" с крестообразным шлицем
- 1 винт с головкой под шлицем № 6 x 0,375" для защиты от несанкционированного вскрытия
- 2 соединителя для считывателей с клеммами
- 1 монтажная плата
- 1 монтажная прокладка (Считыватель с клавиатурой)

### Рекомендуется:

- До 4 муфт для сращивания гибких выводов
- Кабель, 4 жил, калибр 22 или 24 AWG [.65 или .51 mm]
- Линейный источник напряжения постоянного тока
- Металлическая или пластмассовая соединительная коробка
- Спецключ (для защитного винта) HID 04-0001-03

# Specifications

ESPECIFICACIONES  
SPÉCIFICATIONS  
ESPECIFICAÇÕES  
SPEZIFIKATIONEN

SPECIFICHE  
仕様  
规格  
 사양  
ХАРАКТЕРИСТИКИ

PRODUCT PRODUCTO PRODUIT PRODUTO PRODUKT PRODOTTO 製品 产品 제품 ИЗДЕЛИЕ	BASE PART NUMBER NÚMERO DE COMPONENTE BASE RÉFÉRENCE DE BASE NÚMERO DAS PEÇAS BÁSICAS HAUPTTEILENUMMER NUMERO PARTE DI BASE 基本部品番号 基本部件编号 기본부품 번호 БАЗОВЫЙ НОМЕР ИЗДЕЛИЯ	INPUT VOLTAGE (VDC) TENSIÓN DE ENTRADA (VCC) TENSION D'ALIMENTATION (Vcc) VOLTAGEM DE ENTRADA (VCC) EINGANGSSPANNUNG (VDC) TENSIONE IN INGRESSO (V c.c.) 入力電圧(VDC) 输入电压 (VDC) 입력 전압(VDC) НАПРЯЖЕНИЕ ПИТАНИЯ (В постоянного тока)	CURRENT CORRIENTE ELÉCTRICA CONSUMMATION CORRENTE STROMSTÄRKE CORRENTE 電流 电流 전류 ТОК		OPERATING TEMPERATURE TEMPERATURA DE FUNCIONAMIENTO TEMPÉRATURE DE FONCTIONNEMENT TEMPERATURA DE OPERAÇÃO BETRIEBSTEMPERATUR TEMPERATURA D'ESERCIZIO 稼働温度 操作温度 작동 온도 РАБОЧАЯ ТЕМПЕРАТУРА	CABLE LENGTH LONGITUD DEL CABLE LONGUEUR DE CÂBLE COMPRIMENTO DO CABO KABELLÄNGE LUNGHEZZA CAVO ケーブル長 电缆长度 케이블 길이 ДЛИНА КАБЕЛЯ
			AVG	PEAK		
R10 (Hi-O)	6102CKH	5-16 VDC	100 mA	160 mA	-30° - 150° F (-35° - 65° C)	Hi-O Bus Total length - 164 ft MAX (50 m)  Single unterminated stub length - 32.8 ft MAX (10 m)
R15 (Hi-O)	6142CXH		100 mA	160 mA		
R30 (Hi-O)	6112CXH		100 mA	160 mA		
R40 (Hi-O)	6122CXH		100 mA	160 mA		
RK40 (Hi-O)	6132BXH		140 mA	260 mA		

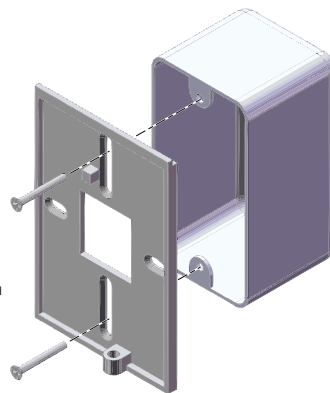
**WARNING: Do NOT connect to Hi-O 24V power supply.**

# 1 Mounting

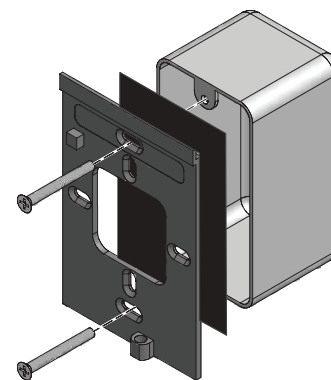
MONTAJE  
MONTAGE  
MONTAGEM  
MONTAGE  
MONTAGGIO

取り付け  
安装  
설치  
КРЕПЛЕНИЕ

Junction box not included.  
Caja para conexiones no incluida.  
Boitier de jonction non inclus.  
Caixa de junção não incluida.  
Anschlusskasten nicht mit inbegriffen.  
Scatola di raccordo non inclusa.  
接続ボックスは含まれていません。  
不包括接线盒。  
연결 박스는 제품에 포함되지 않습니다.  
Соединительная коробка не прилагается

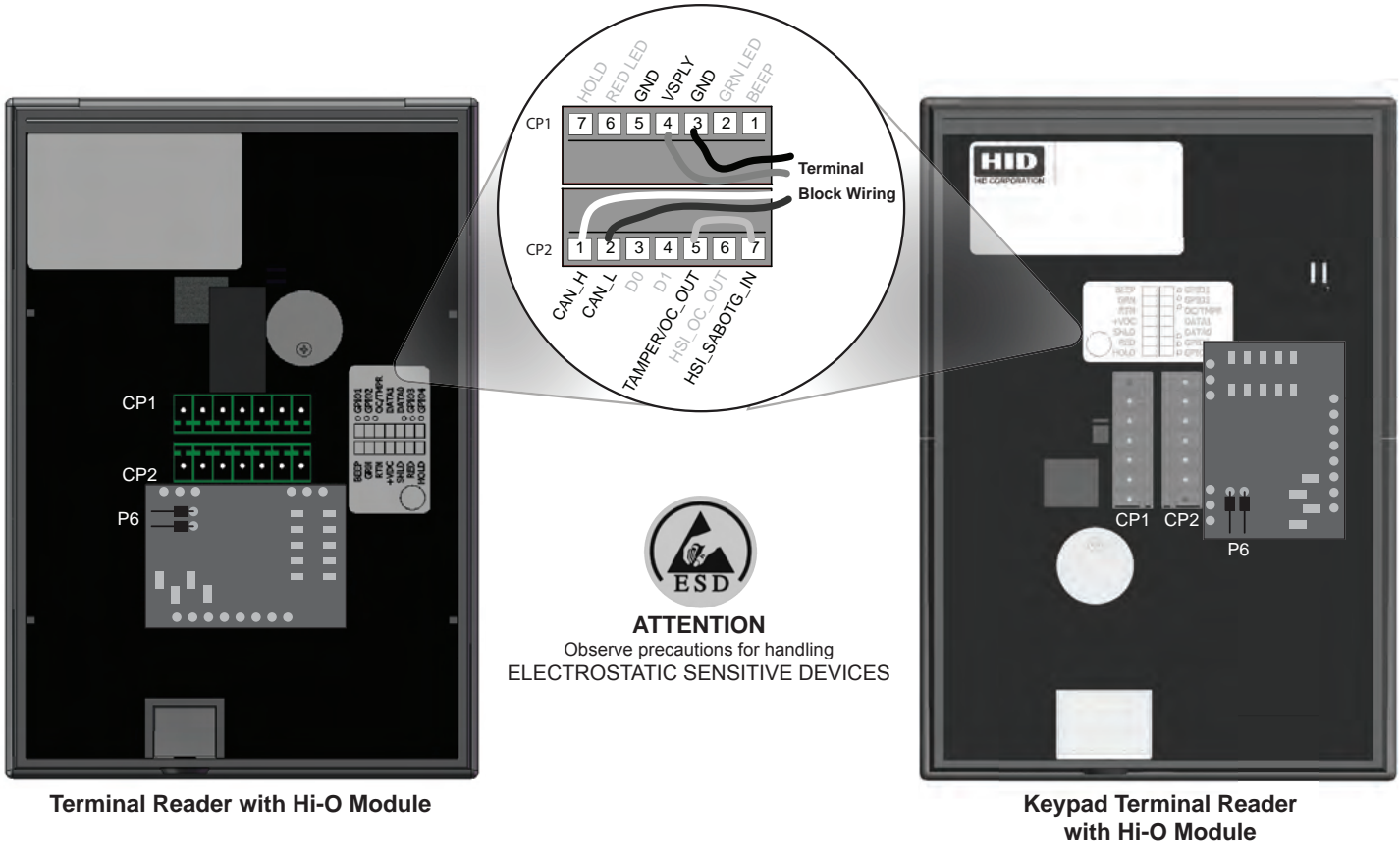


Keypad  
Teclado  
Clavier  
Teclado  
Tastatur  
Tastiera  
キーパッド  
键盘  
키패드  
Считыватель с клавиатурой



# 2 Wiring

CABLEADO CABLAGGIO  
 CÂBLAGE 配線  
 FIAÇÃO 布线  
 VERDRANTUNG 배선  
 ТАБЛИЦА РАСКЛЮЧЕНИЯ ПРОВОДОВ



Terminal Reader with Hi-O Module

Keypad Terminal Reader with Hi-O Module

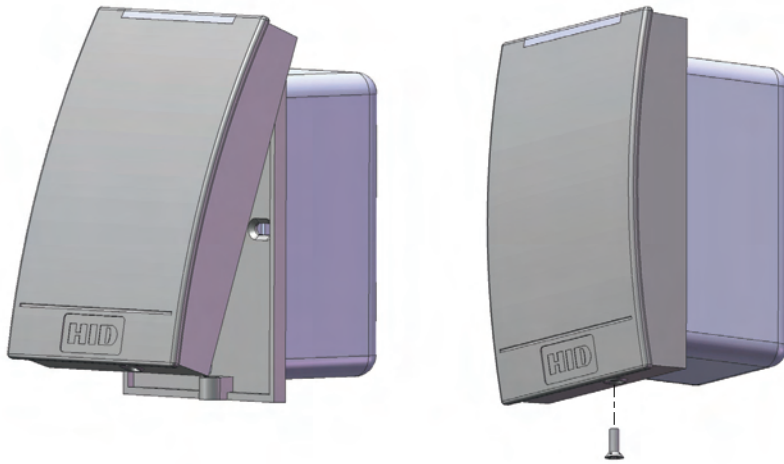
P6 Group Select Option	
Group 1 (Default)	Shorted (Outside - Jumper Installed)
Group 2	Open (Inside - No Jumper)

**Note:** P6 connector found on the underside of module.

**CAUTION:** Tamper functionality is dependent upon correctly installing the jumper wire between CP2-5 and CP2-7. Ensure correct installation and test the tamper switch after installation.

PIN	COLOR	DESCRIPTION	PCB LOCATION
GND	Black	Ground (RTN) - External supply common return. Also a connection point for CAN_GND and optional CAN_SHIELD.	CP1-3 CP1-5
+VSPLY	Red	+VDC (5-16 VDC) External power supply input. <b>WARNING: Do not connect Hi-O 24 VDC Power Supply.</b>	CP1-4
CAN_H	White	Differential CAN bus 'high' signal I/O pin	CP2-1
CAN_L	Brown (Alt Green)	Differential CAN bus 'low' signal I/O pin	CP2-2
Core OC_OUT / SABOTAGE_OUT		OC and Tamper switch output from core module (open collector). Requires a jumper to HSI_SABOTAGE_IN	CP2-5
HSI_SABOTAGE_IN		Tamper switch detects input to HSI module. Pulled up to +5VDC. Allows sabotage detection and messaging over Hi-O network. Requires a jumper to OC_OUT.	CP2-7

# 3 Install Reader to Backplate



INSTALACIÓN DEL LECTOR EN LA PLACA POSTERIOR  
 INSTALLATION DU LECTEUR SUR LA PLAQUE ARRIÈRE  
 INSTALAÇÃO DO LEITOR NA PLACA TRASEIRA  
 LESER AN DER RÜCKPLATTE ANBRINGEN  
 INSTALLAZIONE DEL LETTORE A CONTROPIASTRA  
 背面プレートへのリーダーの取り付け  
 将读卡机安装到后板  
 리더기를 백플레이트에 설치  
 УСТАНОВКА СЧИТЫВАТЕЛЯ НА МОНТАЖНУЮ ПЛАТУ

# 4 System Setup

A DDF file for each device is required during a Hi-O system setup.

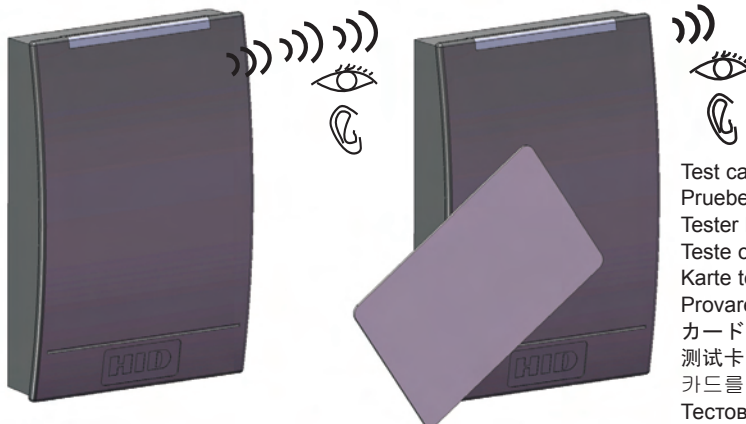
Download the Hi-O reader DDF file from <http://support.hi-o.se/ddf/>

Go to [www.hi-o.se](http://www.hi-o.se) for more information.

# 5 Power & Testing

ENCENDIDO Y PRUEBA  
 ALIMENTATION ET TESTS  
 ENERGIA E TESTE  
 STROMVERSORGUNG UND TESTEN  
 ACCENSIONE E PROVA  
 電源投入とテスト  
 电源和测试  
 전원 및 테스트  
 ВКЛЮЧЕНИЕ ПИТАНИЯ И ПРОВЕРКА

Turn power on  
 Encienda la unidad  
 Mettre sous tension  
 Ligue a energia  
 Einschalten  
 Accendere  
 電源を入れます  
 打开电源  
 전원을 켜십시오  
 Включить питание



Test card  
 Pruebe la tarjeta  
 Tester la carte  
 Teste o cartão  
 Karte testen  
 Provare la tessera  
 カードをテストします  
 测试卡  
 카드를 테스트하십시오  
 Тестовая карта

## UL

These proximity readers are intended to be powered from a limited power source output of a previously certified power supply. These readers are intended to be used with listed (UL294) control equipment.

## FCC / CANADA RADIO CERTIFICATION

These devices comply with part 15 of the FCC rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Le fonctionnement est soumis aux deux conditions suivantes : (1) Ce dispositif ne peut pas causer de perturbations nuisibles et (2) ce dispositif doit accepter toute perturbation quelconque qu'il reçoit, y compris des perturbations susceptibles de provoquer un fonctionnement indésirable. Les changements ou modifications n'ayant pas été expressément approuvés par la partie responsable de la conformité peuvent faire perdre à l'utilisateur l'autorisation de faire fonctionner le matériel.

## CE MARKING

HID Global hereby declares that these proximity readers are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Por el presente, HID Global declara que estos lectores de proximidad cumplen con los requisitos esenciales y otras disposiciones relevantes de la Directiva 1999/5/EC.

HID Global déclare par la présente que ces lecteurs à proximité sont conformes aux exigences essentielles et aux autres stipulations pertinentes de la Directive 1999/5/EC.

A HID Global, por meio deste, declara que estes leitores de proximidade estão em conformidade com as exigências essenciais e outras condições da diretiva 1999/5/EC.

HID Global bestätigt hiermit, dass die Leser die wesentlichen Anforderungen und anderen relevanten Bestimmungen der Richtlinie 1999/5/EG erfüllen.

HID Global dichiara che i lettori di prossimità sono conformi ai requisiti essenziali e ad altre misure rilevanti come previsto dalla Direttiva europea 1999/5/EC.

この装置はMICIにより認証済みです。MIC 証明書番号は AC-07043 です。

## DGT/NCC

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

According to "Administrative Regulations on Low Power Radio Waves Radiated Devices" Without permission granted by the DGT, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to a approved low power radio-frequency devices. The low power radio-frequency devices shall not influence aircraft security and interfere legal communications; If found, the user shall cease operating immediately until no interference is achieved. The said legal communications means radio communications is operated in compliance with the Telecommunications Act. The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.



**ACCESS experience.**

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Patent Pending

Check reader label for current regulatory approvals.

## HID Global

### North America

15370 Barranca Parkway  
Irvine, CA 92618  
USA

Phone: 800 237 7769  
Support: 866-607-7339  
Fax: 949-732-2120  
Email: tech@hidglobal.com

### Asia Pacific

19/F 625 King's Road  
NorthPoint, Island East  
Hong Kong

Phone: 852 3160 9800  
Support: 852 3160 9833  
Fax: 852 3160 4809  
Email: asiassupport@hidglobal.com

### Europe, Middle East & Africa

Phoenix Road  
Haverhill, Suffolk CB9 7AE  
England

Phone: +44 (0) 1440 714 850  
Support: +44 (0) 1440 711 822  
Fax: +44 (0) 1440 714 840  
Email: eusupport@hidglobal.com

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