

法規と規格/Regulations and Standards

以下の海外法規、規格に対応しています。
The Products conform to the following regulations and standards.

1. UL認証/UL Certification

UL(Underwriter's Laboratories, Inc.)の認証を受けています。
The V680-HAM91 and V680-HAM81 has been certified by UL.

- 下記の(1)または(2)の回路に接続してご使用ください。
(1)制限電圧電流回路 (UL508で認定されたもの)
次の条件を満足する絶縁トランスの2次側巻線を電源とする回路
・最大電圧(無負荷時):30Vrms(42.4Vピーク)以下
および
・最大電流:①6A以下(短絡時を含む)または
②下表の定格を持つ回路保護器(ヒューズ等)で制限されている場合

無負荷電圧(Vピーク)	最大電流定格(A)
0~20	5.0
20を超え30まで	100
ピーク電圧値	

- (2)UL1310に従うクラス2電源ユニットまたはUL1585に従うクラス2トランスを電源とする最大電圧30Vrms(42.4Vピーク)以下の回路(クラス2回路)

Connect to either circuit type (1) or (2) listed below.

- (1) Limited Voltage/Current Circuit (Approved under UL 508)

A circuit that uses the secondary windings of an isolation transformer as its power supply and fulfills the following conditions:

- Maximum voltage (with no load): 30 Vrms (42.4 V peak) and
- Maximum current: (a) 8 A (including short-circuits) or (b) Current limited by a circuit protection device (e.g., fuse) with the ratings listed in the following table.

No-load voltage (V peak)	Maximum current rating (A)
0 to 20	5.0
Over 20 to 30	100
Peak voltage	

- (2) A class 2 circuit with a maximum voltage of 30 Vrms (42.4 V peak) that uses a class 2 power supply conforming to UL 1310 or a class 2 transformer conforming to UL 1585 as its power source.

2. 米国/The United States

FCC Part 15 Subpart C

FCC ID	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
E4E6CYSIDV6800208	V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

FCC NOTICE

This device complies 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.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Do not remove the ferrite core (TDK Type ZCAT1730-0730A/V680-HS52/-HS63/-HS65,TDK Type ZCAT1525-0430AP/V680-HS51) installed on the cables to suppress RF interference.

FCC Part15 subpart B

NOTICE

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

3. 欧州/Europe

規格/Standards	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
RE(無線機器)指令 Radio Equipment Directive 2014/53/EU ・無線規格(Radio): EN 300 330 ・EMC規格: EN 301 489-1 ・安全規格(Safety)規格: EN 61010-1 ・人体防護規格: EN 50364 (Human exposure)	V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

4. 日本/Japan

高周波利用設備 誘導式読み書き通信設備

標準規格 ARIB STD-T82

Equipment using high frequencies: Inductive

指定番号/Assigned number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
第EC-08006号	V680-HAM91	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61
第EC-08005号	V680-HAM81	

5. カナダ/Canada

IC ID	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
850J-V6800208	V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

This device complies with Industry Canada licence-exempt RSS standards.

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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ICES-003

This class A digital apparatus complies with Canadian ICES-003.

Cat appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

6. 中国/China

規則/Regulation	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
中华人民共和国 工业和信息化部公告 2019年第52号	V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

- (一) 本产品符合“微功率短距离无线电发射设备目录和技术要求”如下条款:

具体条款: 通用微功率设备 C类设备

(1)使用频率: 13553-13567kHz

(2)10米处磁场强度: 不大于42dB μ A/m (准峰值检测)

(3)频率容限: 100×10^{-6}

(4)特殊频率辐射发射: 对于13553-13567kHz 频段设备, 频段两端偏移140kHz

频率范围的10 米处磁场强度不大于90dB μ A/m (准峰值检测)

使用场景: 通用

采用的天线类型: V680-HS51, V680-HS52, V680-HS63,

V680-HS65, V680-HS61

控制、调整及开关等使用方法: 不适用

- (二) 不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率 (包括额外加装射频功率放大器), 不得擅自更改发射天线;

- (三) 不得对其他合法的无线电台 (站) 产生有害干扰, 也不得提出免受有害干扰保护;

- (四) 应当承受辐射射频能量的工业、科学及医疗 (ISM) 应用设备的干扰或其他合法的无线电台 (站) 干扰;

- (五) 如对其他合法的无线电台 (站) 产生有害干扰时, 应立即停止使用, 并采取措施消除干扰后方可继续使用;

- (六) 在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站 (含测控、测差、接收、导航站) 等军民用无线电台 (站)、机场等的电磁环境保护区域内使用微功率设备, 应当遵守电磁环境保护及相关行业主管部门的规定;

- (七) 禁止在以机场跑道中心点为圆心、半径5000米的区域内使用各类模型遥控器;

- (八) 微功率设备使用时温度的环境条件: $-10 \sim +55^{\circ}\text{C}$

- 电压的环境条件: 直流20.4~26.4V

- (九) 使用微功率短距离无线电发射设备应当符合国家无线电管理有关规定

7. 韓国/Republic of Korea

認証番号/Certification number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
OMR-V680-HAM91	V680-HAM91	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61
OMR-V680-HAM81	V680-HAM81	

8. 台湾/Taiwan

認証番号/Certification number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
CCA808LP375A11	V680-HAM91	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61
CCA808LP375012	V680-HAM81	

取得審驗證明之低功率射頻器材, 非經核准公司、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。
低功率射頻器材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。
前述合法通信, 指依電信管理法規定作業之無線電通信。
低功率射頻器材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。

9. シンガポール/Singapore

登録番号/Registration number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
N0843-08	V680-HAM91	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61
N0842-08	V680-HAM81	

Complies with
IMDA Standards
DB102044

10. メキシコ/Mex co

認証番号/Certification number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
RCPOMV608-0311	V680-HAM91	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61
RCPOMV608-0311-A1	V680-HAM81	

La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

11. フィリピン/Philippines

認証番号/Certification number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
ESD-090379C	V680-HAM91	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61
ESD-0903980C	V680-HAM81	

12. インドネシア/Indonesia

認証番号/Certification number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
94680/SDPPI/2023 PLG ID: 5564	V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

13. ブラジル/Brazil

認証番号/Certification number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
00135-13-04358	V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

V680-HAM81



V680-HAM91



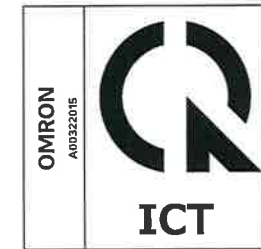
Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

14. オーストラリア・ニュージーランド/Australia and New Zealand

IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

15. ベトナム/Vietnam

管理番号/Control number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
A00322015	V680-HAM91 V680-HAM81	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61



16. 南アフリカ/South Africa

認証番号/Certification number	IDフラグセンサ/ ID Flag Sensor	アンテナ/Antenna
TA-2022/0058	V680-HAM91	V680-HS51 V680-HS52 V680-HS63 V680-HS65 V680-HS61

