

# BWare™

## K-Band DT Grade 2

Model: RK515DTGL



**RISCO GROUP**  
Creating Security Solutions  
With Care.  
riscogroup.com



**U.S. Patent Section:**  
This product is protected under Patent No. US 7,126,476 B2. Other patents pending.

**CE Compliance Section:**  
Risco Ltd, hereby declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For the EoC Declaration of Conformity please refer to our website: www.riscogroup.com

EN 50131-1  
EN 50131-2:4  
Grade 2  
Environmental Class II

**Contains FCC ID UXS-IPM16SF**  
**BWare RK515DTGL FCC Compliance Section:**  
**FCC Part 15 Note:**  
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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.  
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:  
• Reorient or relocate the receiving antenna.  
• Increase the separation between the equipment and receiver.  
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.  
• Consult the dealer or an experienced radio/TV technician.

**FCC Warning:**  
The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

**RISCO GROUP** and its subsidiaries and affiliates ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for 24 months from the date of production. Because Seller does not install or connect the product and because the product may be used in conjunction with products not manufactured by the Seller, Seller cannot guarantee the performance of the security system which uses this product. Seller's obligation and liability under this warranty is expressly limited to repairing and replacing, at Seller's option, within a reasonable time after the date of delivery, any product not meeting the specifications. Seller makes no other warranty, expressed or implied, and makes no warranty of merchantability or fitness for any particular purpose. In no case shall seller be liable for any consequential or incidental damages for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever.  
Seller's obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect, or consequential damages or delay. Seller does not represent that its product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Seller, in no event shall be liable for any direct or indirect damages or any other losses occurring due to any type of tampering, whether intentional or unintentional such as masked, painting or spraying on the lenses, mirrors or any other part of the detector.  
Buyer understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery or fire without warning, but is not insurance or a guaranty that such event will not occur or that there will be no personal injury or property loss as a result thereof.  
Seller's obligation under this warranty shall have no liability for any personal injury, property damage or loss based on a claim that the product fails to give warning. However, if seller is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, seller's maximum liability shall not exceed the purchase price of the product, which shall be complete and exclusive remedy against seller.  
No employee or representative of Seller is authorized to change this warranty in any way or grant any other warranty.  
**WARNING:** This product should be tested at least once a week.  
**CAUTION:** risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to local regulations.

**RISCO GROUP** is committed to customer service and product support. You can contact us through our website (www.riscogroup.com) or at the following telephone and fax numbers:

**UK** Tel: +44-(0)-161-655-5500 support-uk@riscogroup.com

**ITALY** Tel: +39-02-66590054 support-it@riscogroup.com

**SPAIN** Tel: +34-91-490-2133 support-es@riscogroup.com

**FRANCE** Tel: +33-164-73-28-50 support-fr@riscogroup.com

**BELGIUM** Tel: +32-252-7622 support-be@riscogroup.com

**U.S.A.** Tel: +1-631-719-4400 support-usa@riscogroup.com

**BRAZIL** Tel: +55-11-3661-8767 support-br@riscogroup.com

**CHINA (Shanghai)** Tel: +86-21-52-39-0066 support-cn@riscogroup.com

**CHINA (Shenzhen)** Tel: +86-755-82739285 support-cn@riscogroup.com

**POLAND** Tel: +48-22-500-28-40 support-pl@riscogroup.com

**ISRAEL** Tel: +972-3-963-7777 support@riscogroup.com

## ENGLISH

The BWare DT detector is the ultimate motion detector for professional installations, incorporating Anti-Cloak™ Technology (ACT™) and includes built-in end-of-line (EOL) resistors to simplify installation. The detector employs K-Band microwave providing reduced wall penetration.

**Installation / Maintenance**  
Mounting - The BWare DT can be mounted either on a flat surface or on a wall corner (corner mounting).

- Remove detector's front cover using a suitable tool (as described in Figure 1).
- Using a suitable tool, open the following knockouts on the detector's base (see Figure 2).
- To see the correct vertical adjustment position for wide angle lens, use the scale on the bottom right hand side of the PCB cover as follows:  
**Mounting height and scale position based on room size:**

Mounting Height	L - LONG	S - SHORT
2.1m-2.7m (6'11"-8'10")	15m (50')	6m (20')

- Set jumpers (see Jumper Setting section below).

**Note:** Reset the detector after each change made to the settings.

- Install the front cover back to its place (in a reverse sequence of the removal).
- Perform a Walk test (see Walk Test section below).

**Terminal Wiring** (see Figure 5)

Terminal	Description
- 12 +	12VDC Input
ALARM	N.C. Relay
TAMPER	N.C. Tamper switch
LED	LED operation remote control

When an "Activation Signal"™ is applied to the LED input terminal, all LEDs will be disabled.  
LEDs are enabled if nothing is connected (unless LED jumper is OFF) or 0V/12V is applied (according to the LED Input Jumper position, 12V or 0V).

\*\*Activation Signal- If 12VDC is applied, and the LED Input Jumper is on 12V position (Default position) - Or - If 0V is applied and LED Input Jumper is on 0V position

**Jumper Settings**

Jumper	Function
SW1-1: LED	Used to determine the operation of the detector's LEDs
ON: (Default)	LEDs are enabled, allowing LED control via the LED input terminal
OFF:	LEDs are disabled
SW1-2: ACT	Used to determine if ACT mode is enabled or disabled
ON	ACT Enabled
OFF (Default)	ACT Disabled.
SW1-3: Green Line	The BWare DT includes a Green Line feature that follows environmental guidelines. This feature disables the MW channel when the alarm system is "Unset", thus eliminating surplus MW emission while the premises is occupied.
ON	Green Line feature is enabled. To deactivate the MW module during "UNSET", the LEDs must also be remotely disabled by the LED terminal.
OFF (Default)	Green Line feature is disabled; MW is constantly in use.
SW1-4: Self Test	Not applicable in this version.
J1 - Alarm EOL J2 - Tamper EOL	Jumpers J1 and J2 allow the selection of Tamper and Alarm resistances (1K, 2.2K, 4.7K, 5.6K, 6.8K) according to the control panel (see Figure 4). Follow the terminal block connection diagram in Figure 4 when connecting the detector to a Double End Of Line (DEOL) Zone.
J4 - LED INPUT	Used to determine the polarity of the external LED input.
ON	ACT enabled
OFF (Default)	ACT disabled.

**Walk Test**  
1. Two minutes after applying power (warm-up period), walk test the Detector over the entire protected area to verify proper operation of the unit (see Figure 7).  
2. The K-Band MW range must be adjusted using the potentiometer located on the PCB. It is important to set the potentiometer to the lowest possible setting that will still provide enough coverage for the inner boundary protected area (see Figure 5).

**LEDs Display**

LED	State	Description
Yellow	On	PIR detection
	Flashing	Trouble in PIR channel
Green	On	MW detection
	Flashing	Trouble in MW channel
Blue	On	ALARM
All LEDs	Flashing consecutively	At power-up, the LEDs will flash consecutively until the end of the warm-up period (2-3 minutes).

**Technical Specification**

Electrical	
Current consumption	16mA at 12VDC (typical) 41mA at 12VDC (max.)
Voltage requirements	9 -16VDC***
Alarm contacts	24VDC, 0.1A
Tamper contacts	24VDC, 0.1A
Environmental	
RF immunity	According to EN50130-4
Operating temperature	-10°C to 55°C (14°F to 131°F)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Optical	
Filtering	White Light Protection
Physical	
Size	127.6 x 64.2 x 46.6 mm (5 x 2.5 x 1.84 in.)
Weight	120 gr. (4.2 oz)

\*\*\* Power to be supplied by 5A max. power source using safety approved wires, with a min Gauge of 20AWG.

## ITALIANO

Il rivelatore BWare DT è un rivelatore di movimento che integra le tecnologie più avanzate per le installazioni professionali. Questo rivelatore include quella Anti-Cloak™ (ACT™) ed ha le resistenze di fine linea integrate nel circuito per semplificarne al massimo l'installazione.

Il rivelatore BWare DT utilizza la microonda in banda K la quale consente una penetrazione ridotta attraverso i muri.

**Installazione / Manutenzione**  
Installazione - Il rivelatore BWare DT può essere installato sia su di una superficie piana che ad angolo.

- Rimuovere il coperchio del rivelatore utilizzando un attrezzo appropriato (come descritto nella Figura 1).
- Utilizzando uno strumento appropriato aprire i fori a sfondare, di seguito elencati, della base del contenitore come illustrato in Figura 2.
- Per selezionare la posizione corretta della scheda elettronica con la lente grandangolo montata, usare i riferimenti (LONG / SHORT) situati nella parte inferiore destra della scheda elettronica seguendo le indicazioni della tabella di seguito illustrata:

Altezza di installazione	L - LONG	S - SHORT
2.1m-2.7m	15m	6m

- Predisporre i ponticelli e i microinteruttori (Vedere la sezione relativa).

**NOTA:** Ad ogni modifica delle predisposizioni/regolazioni, effettuare sempre un reset del rivelatore rimuovendo e applicando tensione.

- Rimontare il coperchio frontale e stringere la vite di blocco coperchio.
- Effettuare una prova di copertura (Sezione Prova di movimento vedere in basso).

**cablaggio Morsetteria** (vedere Figura 5)

Morsetto	Descrizione
- 12 +	Ingresso di alimentazione 12V
ALARM	Relé N.C.
TAMPER	Interruttore N.C.
LED	Controllo remoto dei LED e funzione GREEN LINE (con microinteruttore SW1-3 in posizione ON)

Quando viene applicato un "Segnale di Attivazione"™ al morsetto LED, tutti i LED vengono disabilitati e, se il microinteruttore GREEN LINE è in ON, la sezione microonda viene disabilitata.

I LED sono abilitati se al morsetto LED non è collegato niente (a meno che il ponticello LED sia estratto).

**\*\*Per Segnale di attivazione si intende quanto segue -**  
- Viene applicata una tensione 12 Vcc e il ponticello LED Input è nella posizione 12V (posizione di default)  
- Viene applicato un riferimento di alimentazione 0V e il ponticello LED Input è nella posizione 0V

**Predisposizione microinteruttori e ponticelli**

Micrint/Pontic.	Funzione
SW1-1: LED	Usato per abilitare o disabilitare il funzionamento dei LED
ON (Default)	I LED sono abilitati ed è possibile anche controllarli via comando remoto tramite l'ingresso LED.
OFF	I LED sono disabilitati. Non è possibile alcun controllo remoto.
SW1-2: ACT	Usato per abilitare o disabilitare la funzione ACT.
ON	ACT abilitato
OFF (Default)	ACT disabilitato.
SW1-3: Green Line	BWare DT include la funzione Green Line che evita emissioni radio superflue nell'ambiente. Questa funzione disabilita il canale a microonda (MW) quando il sistema di sicurezza è disinnescato.
ON	La funzione Green Line è abilitata. Per disabilitare la sezione microonda (MW) a sistema DISINERITO va applicato un comando di attivazione al morsetto LED (0V o 12V in funzione della polarità configurata tramite il ponticello LEDSET INPUT). Anche i LED verranno in questo caso disabilitati. La sezione microonda viene disabilitata in questo modo solo se al morsetto SET non viene applicata alcuna tensione.
OFF (Default)	La funzione Green Line è disabilitata. La sezione a microonda (MW) è sempre accesa.
SW1-4: Self Test	Non applicabile in questa versione.
J1 - Alarm EOL J2 - Tamper EOL Ponticelli Per resistenze EOL	I ponticelli J1 e J2 permettono la selezione dei valori resistivi da assegnare ai circuiti di Tamper e di Allarme (1K, 2.2K, 4.7K, 5.6K, 6.8K) in funzione della centrale d'allarme utilizzata (vedere la Figura 4 in basso). Seguire lo schema di collegamento dei morsetti illustrato in Figura 4 quando si vuole collegare il sensore ad una centrale d'allarme usando il doppio bilanciamento resistivo (DEOL).

## Predisposizione microinteruttori e ponticelli

Micrint/Pontic.	Funzione
J4- LED	Usato per impostare la polarità dei comandi di attivazione per gli ingressi LED.

Posizionato sul lato 12V richiede come comando di attivazione una tensione positiva. Fare riferimento alla sezione relativa il Cablaggio Morsetteria, morsetto LED.

Posizionato su 0V richiede come comando di attivazione un riferimento negativo di alimentazione 0V. Fare riferimento alla sezione relativa il Cablaggio Morsetteria, morsetto LED.

**Prova di movimento (Walk Test)**  
1. Due o tre minuti dopo aver alimentato il rivelatore (inizializzazione) effettuare la prova di copertura dell'area da proteggere verificando la risposta del rivelatore tramite l'accensione dei LED (vedere Figura 7).  
2. La portata della microonda va regolata tramite l'apposito potenziometro situato sulla scheda elettronica. Regolare il potenziometro della microonda al minimo possibile riferito all'area da proteggere (vedere Figura 5).

**LED Stato Descrizione**

LED	Stato	Descrizione
Giallo	Illuminato	Rilevazione del canale PIR
Lampeggiante		Anomalia del canale PIR
Verde	Illuminato	Rilevazione del canale MW
Lampeggiante		Anomalia del canale MW
Blu	Illuminato	ALLARME
Tutti i LED	Lampeggianti consecutivamente	All'alimentazione tutti i LED lampeggiano in sequenza fino alla fine del periodo di inizializzazione (2-3 minuti).

**Specifiche Tecniche**

Ellettriche	
Absorbimento di corrente	16mA a 12V - (Nominale) 41mA a 12V - (Massimo)
Alimentazione richiesta	da 9V a 16V...
Contatti di allarme	24V - 0.1A
Contatti Tamper	24V - 0.1A
Ambientali	
Immunità RF	Conforme alle norme EN50130-4
Temp. funzionamento	da -10°C a 55°C
Temp. stoccaggio	da -20°C a 60°C
Optica	
Filtro	Protezione contro le luci bianche
Fisiche	
Dimensioni	127.6 mm x 64.2 mm x 46.6 mm
Peso	120 gr.

## FRANÇAIS

Le détecteur BWare DT est le dernier détecteur de mouvements pour les installations professionnelles, et intègre les technologies Anti-Cloak™ (ACT™) ainsi que des résistances de fin de ligne (EOL) pour simplifier l'installation.

Le détecteur utilise un module Hyper Fréquence en bande K, qui permet une réduction de la pénétration à travers les murs.

**Installation**  
Montage - l'BWare DT peut être installé soit sur une surface plane soit en coin (cau ou droit).

- Retirer le détecteur de couvercle frontal à l'aide d'un outil adéquat (voir la Figure 1).
- A l'aide d'un outil adéquat, ouvrez les pastilles pré-perçées correspondantes sur la base du détecteur (cf. Figure 2).
- Pour définir le bon réglage vertical, positionnez l'appareil en LENTILLE GRAND ANGLE. Servez-vous de l'échelle figurant sur le côté inférieur droit de la carte PCB de couvercle (cf. Figure 7) comme suit :

**Hauteur de montage et position selon la taille de la pièce :**

Hauteur de montage	L - LONG	C - COURT (SHORT)
2.1m-2.7m (6'11"-8'10")	15m (50')	6m (20')

- Réglez les cavaliers (cf. § Réglage des cavaliers).

**Remarque:** Il est conseillé de réinitialiser le détecteur après chaque modification apportée au réglage.

- Remplacez le couvercle frontal (en inversant pour cela l'ordre des étapes de la procédure de retrait).
- Exécutez un test de passage (cf. § Test de passage ci-dessous).

**Cablage des terminaux** (cf. Figure 5)

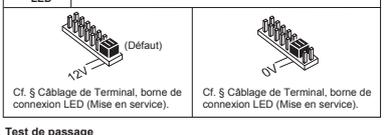
Terminal	Description
- 12 +	Entrée 12VDC
ALARM	Relais N.F., 24VCC, 0.1A
TAMPER	Relais N.F., 24VCC, 0.1A
LED	Contrôle à distance des indicateurs LED

Lorsqu'un "Signal d'Activation"™ est appliqué à l'entrée LED du bloc des terminaux ou bornes de connexion, les indicateurs LED se désactivent (cf. aussi l'entrée Test automatique dans le tableau consacré au Réglage des cavaliers). Les voyants LED sont activés si rien n'est relié (sauf si le cavalier LED est éteint (OFF)).

**\*\*Signal d'Activation-**  
Si une tension de 12VCC est appliquée et que le Cavalier d'entrée LED est en position 12V (Défaut de position) - Ou - Si la Terre (GND) est reliée, le Cavalier d'entrée LED est en position 0V.

## Réglage des cavaliers

Cavalier	Fonction
SW1-1: LED	Définit le fonctionnement des indicateurs LED du détecteur.
ON: (Défaut)	L'activation des indicateurs LED dépend du paramétrage du contrôle à distance de leur fonctionnement (cf. § Cablage des Terminaux, borne de connexion LED).
Arrêt (OFF)	Les indicateurs LED sont désactivés.
SW1-2: ACT	Définit si le mode ACT™ est actif ou non
Marche (ON)	ACT activé. <b>Important!</b> N'utilisez pas le mode ACT™ dans une zone en dehors de laquelle le passage d'objets en mouvement vous paraît logique et attendu, un couloir par exemple.
Arrêt (OFF)	ACT désactivé.
SW1-3: Green Line	Le BWare DT intègre la fonction Green Line, qui suit les recommandations environnementales. Cette fonction désactive le canal hyper fréquence quand le système d'alarme est désarmé, pour éliminer le surplus d'émissions HF que les locaux sont occupés.
Marche (ON)	La fonction Green Line est activée : Pour désactiver le module HF pendant le désarmement, les LEDs doivent aussi être désactivées par le terminal de connexion LED.
Arrêt (OFF)	Green Line désactivé (OFF): le canal HF est constamment actif.
SW1-4: Test automatique	Non applicable dans cette version.
J1 - Alarm EOL J2 - Tamper EOL	Les cavaliers J1 et J2 permettent de sélectionner les résistances EOL (fin de ligne) d'Autoprotection, Alarme et FAULT (1K, 2.2K, 4.7K, 5.6K, 6 et 8K) en fonction de la centrale (cf. Figure 4 ci-dessous). Suivez les indications du diagramme de connexion du bloc des terminaux de la Figure 4 pour relier le détecteur à une zone EOL Double (DEOL).
J4 - Entrée LED	Détermine la polarité de l'entrée externe LED.



**Test de passage**  
1. Deux minutes après avoir réalisé la mise sous tension (séquence d'échauffement), effectuez un test de passage pour vérifier l'efficacité du détecteur sur la totalité de la zone à protéger.  
2. Assurez-vous d'avoir bien réinstallé le couvercle frontal avant de mettre le détecteur sous tension (cf. Figure 7).  
3. Le potentiomètre situé sur la carte PCB permet de régler la portée de détection hyperfréquence. Il est important de régler le potentiomètre sur le niveau le plus bas possible qui fournira cependant une couverture suffisante sur la totalité de la zone à protéger (cf. Figure 5).

**Affichage LED**

LED	Position	Signification
Verte	Allumée (ON)	Détection PIR
Allumée (ON)		Panne de canal PIR
Cilignotante		Détection HF (hyperfréquence)
Allumée (ON)		Panne de canal HF
Bleu	Allumée (ON)	Indique une ALARME
Toutes diodes LED	Cilignotante l'une après l'autre	Lors de la mise sous tension, les diodes LED cilignotent de manière ininterrompue, l'une après l'autre, jusqu'à la fin de la séquence d'échauffement (2 à 3 minutes).

**Spécifications techniques**

Électriques	
Consommation électrique	14.8 mA à 12VCC (en utilisation typique) 39.5 mA à 12VCC (max. avec tous les voyants LED allumés)
Tension requise	9 -16VCC
Contacts d'alarme	24VCC, 0.1A
Temps minimal de changement d'état.	2.2 seconds
Contacts d'autoprotection	24VCC, 0.1A
Résistance de la bouche de Détection.	État ouvert: plus que 10 <sup>6</sup> État fermé: moins que 1 ohm
Onduleurs résolubles maximales admissibles.	0.25 crête à crête admissibles.
Environnementales	
Immunité RF	Selon EN50130-4
Température de fonctionnement	De -20°C à 55°C (-4°F à 131°F)
Température de stockage	De -20°C à 60°C (-4°F à 140°F)
Indice de protection:	IP 31XK 02
Taille du câble à utiliser:	Fil de diamètre au moins 0.5 mm pour une longueur ne dépassant pas 300 mètres
Optiques	
Filtrage	Protection anti-lumière blanche
Physiques	
Dimensions	127.6 x 64.2 x 46.6 mm (5 x 2.5 x 1.84 in.)
Poids	120g

# NEDERLANDS

De BWare DT detector is de ultieme bewegingsmelder voor professionele installaties, met geïntegreerde technologie Anti-Cloak™ (ACT™) met ingebouwde end-of-line (EOL) weerstanden voor een eenvoudige installatie.

De detector maakt gebruik van de K-Band microwave om muur penetratie te verminderen.

### Installatie / Onderhoud

- Montage - De BWare DT kan op een vlakke oppervlakte worden gemonteerd, of op een muurhoek (hoekmontage).
- 1. Verwijder het voorste lid met het juiste gereedschap (zoals beschreven in Afbeelding 1).
- 2. Met een passend gereedschap open u de volgende uitwerpers op de basis van de detector (zie Afbeelding 2).
- 3. Om voor de brede hoeklens de juiste verticale afstelpositie te selecteren, gebruikt u de schaal op de rechts onderkant van de PCB lid. U doet dit als volgt:

### Montagehoogte en schaalpositie op basis van kamergroote:

Montagehoogte	L - LANG	C - KORT
2.1m-2.7m	15m	6m

**Opmerking:** Voor installaties in een hal selecteert u de positie naar LANG en monteert u de detector op een hoogte van 2,5 m/8'2".

4. Jumpers instellen (zie sectie Jumperinstellingen).

**Opmerking:** Na elke wijziging aan de instellingen, moet de detector opnieuw ingesteld worden.

- 5. Installeer het voorste lid terug op zijn plaats (in omgekeerde volgorde van verwijdering).
- 6. Voer een looptest uit (zie sectie Looptest hieronder).

### Bedrading terminal (zie Afbeelding 5)

Terminal	Beschrijving
- 12 +	12 VDC-ingang
ALARME	N.C.-relais
TAMPER	N.C. Sabotageschakelaar
LED	LED-werking afstandsbediening

Als op de LED van de ingangsterminal een "Activeringssignaal™" wordt toegepast, worden alle LED's uitgeschakeld. LED's worden ingeschakeld als riks is aangesloten (tenzij LED-Jumper op UIT is ingesteld) of 0V/12V wordt toegepast (volgens de LED positie van de ingangsjumper, 12 V of 0 V).

### \*\*Activeringssignaal™

Als 12 VDC wordt toegepast en de ingangsjumper LED is op de positie 12V (standaardpositie) -Of-

0 V wordt toegepast en ingangsjumper LED is op positie 0 V

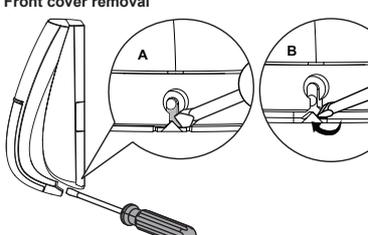
### Jumperinstellingen

Jumper	Funcie
SW1-1: LED	Gebruikt om de werking van de LED's van de detector vast te stellen.
AAN (Standaard)	LED's worden ingeschakeld zodat via de ingangsterminal van de LED, LED-besturing mogelijk is.
UIT	LED's worden uitgeschakeld.
SW1-2: ACT	Gebruikt om vast te stellen of de ACT-modus is in- of uitgeschakeld.
AAN	ACT ingeschakeld
<b>Belangrijk!</b> Niet de ACT™-modus gebruiken als u verwacht dat er een hal beschermde gebied (zoals bijvoorbeeld een hal, bewegende objecten zijn).	
UIT (Standaard)	ACT uitgeschakeld.
SW1-3: Groene lijn	De BWare DT bevat de Groene lijn functie die milieuschijven volgt door een overscherm uitstraling te vermijden. Deze functie schakelt het MW-kanal uit als het alarmsysteem "uitgeschakeld" is en dus de overmatige MW-uitstraling vermijdt wanneer het gebied bezet is.
AAN	Groene lijn functie is ingeschakeld; om de MW-module in de periode "uitgeschakeld" te deactiveren, moeten ook de LED's van op afstand door de LED-terminal worden uitgeschakeld.
<b>Opmerking:</b> Als de 'Groene lijn' functie aan is (microgolf uit), is de detector nog steeds actief (enkel PIR).	
UIT (Standaard)	Funcie Groene lijn is uitgeschakeld; MW is constant in gebruik
SW1-4: Zelf Test	Niet van toepassing in deze versie.
J1 - Alarm EOL	Jumpers J1 en J2 maken de selectie mogelijk voor sabotage en alarmweerstand (1K, 2.2K, 4.7K, 5.6K, 6.8K)
J2 - Sabotage EOL	Volg het aansluitingsschema van het aansluitblok in Afbeelding 4 als u de detector op een weevoudige zone aan het einde van de lijn (DEOL) aansluit.
J4 - LED	Gebruikt om de polariteit van de externe LED ingang vast te stellen.

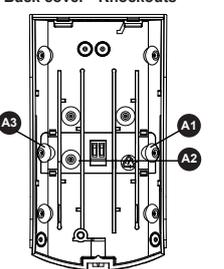
### Looptest

- 1. Twee minuten na het toepassen van voeding (opwarmingsperiode), voert u over het hele beschermde gebied van de detector de looptest uit om goede werking van de eenheid te verifiëren (zie Afbeelding 7).
- 2. Het MW-bereik kan worden afgesteld door de potentiometer op de PCB te gebruiken. Het is belangrijk dat de potentiometer op de laagst mogelijke instelling wordt ingesteld om het binnenste beschermde gebied voldoende dekking te bieden (zie Afbeelding 5).

### Figure 1. Front cover removal

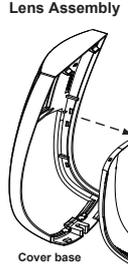


### Figure 2. Back cover - Knockouts



Terminal	Beschrijving
A1	Right corner mounting knockouts
A2	Wall mounting knockout
A3	Left corner mounting knockout

### Figure 3. Lens Assembly



# Display LED'S

LED	Status	Beschrijving
Geel	Aan	PIR-detecte
Groen	Knippen	Storing in PIR-kanal
	Aan	MW-detecte
Blauw	Knippen	Storing in MW-kanal
	Aan	ALARME
Alle LED'S	Knippen achtereenvolgende	Bi het opstarten, zullen de LED'S achtereenvolgens knippen tot het einde van de opwarmperiode (2-3 minuten).

### Technische specificaties

Elektrisch	
Stroomverbruik	16mA bij 12VDC (typisch) 41mA bij 12VDC (Max.)
Spanningsvereisten	9-16VDC
Alarmcontacten	24VDC, 0.1A
Sabotagecontactencontacten	24VDC, 0.1A
Omgeving	
RF-immuuniteit	Volgens EN50130-4
Bedrijfstemperatuur	-10°C tot 55°C
Opslagtemperatuur	-20°C tot 60°C
Optisch	
Filtering	Wit licht-bescherming
Fysiek	
Grootte	127.6 x 64.2 x 46.6 mm
Gewicht	120 gr.

# ESPAÑOL

El detector BWare DT es lo último en detectores de movimiento para instalaciones profesionales, incorporando la tecnología Anti-Cloak™ (Anti-Camulaje), e incorporando resistencias de final de línea para facilitar la instalación.

El detector emplea la Banda K de microondas, que proporciona una menor penetración a través de las paredes.

### Instalación / Mantenimiento

- Montaje - El BWare DT puede montarse en una superficie plana o en un rincón de pared (montaje en rincón).
- 1. Quitar la tapa del detector utilizando una herramienta adecuada (como se indica en la Figura 1).
- 2. Usando una herramienta apropiada, abra los siguientes agujeros pre-marcados en la base del detector (ver Figura 2).
- 3. Para seleccionar la posición de ajuste vertical correcta para la lente de gran angular, usar la escala que hay en la parte inferior derecha de la PCB, según se indica a continuación:

Altura de montaje	L - LONG	S - SHORT
2.1m-2.7m (6'11"-8'10")	15m (50')	6m (20')

- 4. Configure los puentes (ver la sección Configuración de Puentes).

**Nota:** Reinicie el detector después de que se haga un cambio en las configuraciones.

- 5. Coloque de nuevo la tapa delantera en su lugar (de modo inverso al de extracción).
- 6. Realice una prueba de Movimiento (ver la sección Prueba de Movimiento).

### Cableado del Terminal (ver Figura 5)

Terminal	Descripción
- 12 +	Entrada de 12VCC
ALARME	Relé N.C.
TAMPER	Interrupción del Tamper N.C.
LED	Control remoto del funcionamiento del LED

Cuando se aplica una "Señal de Activación™" al terminal de entrada del LED, se desactivan todos los LEDs. Los LEDs se activan si no hay nada conectado (a menos que el puente del LED esté en OFF) o se aplican 0V/12V (según la posición del Puente LED Input, 12V ó 0V)

### \*\*Señal de Activación™

Si se aplican 12VCC, y el puente (jumper) LED INPUT está en la posición 12V (posición por defecto) O Se aplican 0V y el puente (jumper) LED INPUT está en la posición 0V.

### Configuración de los Puentes

Puente	Función
SW1-1: LED	Se utiliza para definir el funcionamiento de los LEDs del detector.
ON (Predeterm)	Los LEDs están habilitados, permitiendo el control del LED a través del terminal de entrada del LED
OFF	Los LEDs están deshabilitados.
SW1-2: ACT	Usado para determinar si el modo ACT está habilitado o deshabilitado
ON	ACT Habilitado
<b>Importante!</b> No use el modo ACT™ si usted espera que haya objetos en movimiento fuera del área protegida requerida, p.ej. un pasillo.	
OFF (Predeterm)	ACT Deshabilitado.
SW1-3: Green Line	El BWare DT incluye la característica Green Line que sigue las directivas medioambientales evitando un exceso de emisión. Esta característica deshabilita el canal MW cuando el sistema de alarma está "DESARMADO", eliminando así la emisión excedente de MW mientras las instalaciones estén ocupadas.
ON	La característica Green Line está habilitada. Para desactivar el modo de MW en el período de "Desarmado", los LEDs también deben deshabilitarse remotamente mediante el terminal LED.
<b>Nota:</b> Cuando el 'Green Line' está activado (MW desactivado), el detector seguirá activo (sólo con el PIR).	
OFF (Predeterm)	La característica Green Line está deshabilitada. el MW está constantemente en uso.

# Configuración de los Puentes

Puente	Función
SW1-4: SELF TEST (Auto Test)	Usado para testar las tecnologías de detección.
J1 - Alarm EOL	Los puentes J1 y J2 permiten la selección de la resistencia del Tamper y de la Alarma (1K, 2.2K, 4.7K, 5.6K, 6.8K) en función de a central (ver Figura 4).
J2 - Tamper EOL	Si el diagrama de conexión del bloque de terminales de la Figura 4 cuando conecte el detector a una Zona de Doble Fin-de-Línea (DEOL)
J4 - LED INPUT (ENTRADA LED)	Usado para determinar la polaridad de la entrada LED externa.



### Prueba de Movimiento

- 1. Dos minutos después de la puesta en marcha (período de calentamiento), haga la prueba de movimiento al detector en toda el área protegida para verificar el correcto funcionamiento de la unidad (ver Figura 7).
- 2. El rango de la Banda K del MW puede ajustarse mediante el potenciómetro situado en el PCB (placa de circuito impreso). Es importante ajustar el potenciómetro a la configuración más baja posible que aún pueda proporcionar suficiente cobertura al límite interno del área protegida (ver Figura 5).

### Visualización de los LEDs

LED	Estado	Descripción
Amarillo	Encendido	Detección PIR
	Parpadeando	Problema en el canal PIR
Verde	Encendido	Detección MW
	Parpadeando	Problema en el canal MW
Azul	Encendido	ALARMA
Todos los LEDs	Parpadeando sucesivamente	Al dar alimentación, los LEDs parpadearán consecutivamente hasta que finaliza el periodo de calentamiento (2-3 minutos).

### Especificaciones Técnicas

Eléctricas	
Consumo de corriente	16mA a 12VCC (Típico) 41mA a 12VCC (Máx.)
Requisitos de voltaje	9-16VCC ***
Contactos de Alarma	24VCC, 0.1A
Contactos de Tamper	24VCC, 0.1A
Ambientales	
Inmunidad a RF	Según EN50130-4
Temperatura de funcionamiento	-10°C a 55°C (14°F a 131°F)
Temperatura de almacenamiento	-20°C a 60°C (-4°F a 140°F)
Óptica	
Filtrado	Protección contra luz blanca
Físicas	
Tamaño	127.6 x 64.2 x 46.6 mm (5 x 2.5 x 1.84 pol.)
Peso	120 gr. (4.2 oz.)

\*\*\* Alimentado desde una fuente de alimentación de máximo 5A.

# PORTUGUÊS

O detector BWare DT é a última palavra em detector de movimento para instalações profissionais, incorporando a tecnologia Anti-Cloak™ (ACT™). Tecnologia Anti-camulagem, aderindo às novas diretivas amigáveis do meio-ambiente.

O detector BWare DT é disponível em 15m, e incluem resistências embudidas de fim-de-linha (EOL) para simplificar a instalação.

### Instalação / Manutenção

- Montagem - O BWare DT pode ser montado numa superfície plana ou num canto da parede (montagem de canto).
- 1. Retire a tampa da frente do detector usando a ferramenta adequada (conforme descrito na Figura 1).
- 2. Usando uma ferramenta apropriada, abra os seguintes furos pré-marcados na base do detector (ver Figura 2).
- 3. Para usar a posição correta de ajuste vertical para lentes de ângulo aberto, use a escala localizada no lado direito inferior a tampa do PCB, como segue:

Altura de montagem e posição da escala baseada no tamanho do local:	L - LONGA	C - CURTA
2.1m-2.7m (6'11"-8'10")	15m (50')	6m (20')

- 4. Configure os jumpers (ver a seção Configuração de Jumpers).

**Nota:** Reajuste o detector depois de cada modificação feita nas configurações.

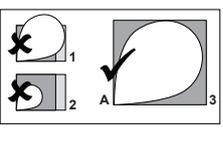
- 5. Recolhe a tampa dianteira em seu lugar (na sequência contrária à da remoção)
- 6. Realize uma prova de Caminhada (ver abaixo a seção Prova de Caminhada).

### Terminais de Fiação (ver. Figura 5)

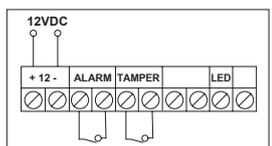
Terminal	Descrição
- 12 +	Entrada de 12VDC
ALARME	Relé N.F.
TAMPER	Chave do tamper N.F.
LED	Controle remoto da operação do LED

Cuando um "Sinal de Aclonamento™" é aplicado ao terminal de entrada do LED, todos os LEDs serão desativados. Os LEDs são ativados se nada estiver conectado (a menos que o jumper do LED esteja em OFF) ou 0V/12V for aplicado (segundo a posição do Jumper de Entrada do LED, 12V ou 0V).

### Figure 5. K-Band MW range adjustment



### Figure 6. Terminal Wiring



### Figure 7. BWare 15m DT GL Coverage

