



# SmartCam Installation Sep 2019



# MICRONET SmartCam



## All In One

All your video telematics  
needs in a single device

Fit for purpose | Open Android | Affordable

 MICRONET



Telematics  
Black box



Panic Button



Distracted Driver Detection  
(Driver Camera)



Cellular modem  
or Wifi dongle



Dashcam  
(Road Camera)



ADAS System

# MICRONET SmartCam



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# Main milestones

- SmartCam Basic model
  - Beta – Mid October 2019
  - GA – EOM October 2019
- SmartCam Enhanced model
  - Beta – EOM October 2019
  - GA – EOM January 2020
  - Advanced diagnostic - EOM February 2020



# Micronet SmartCam

The innovative vehicle compute hub with integrated Video Telematics features for advanced Fleet Management

**Micronet SmartCam** is a next generation Android™ enabled Video Telematics On-Board-Computer.

Its dual camera & Open Android high-power processing and communication capabilities support simultaneous operation of real time Video Analytics and Advanced Mobility Solutions such as:



Video Safety (ADAS)



Video Analytics



Driver Fatigue Recognition



Engine Diagnostics



Driver Behavior



Fuel Efficiency



ELD HOS



Fleet Tracking



Driver Coaching



## Key Features:

Road-facing (110°) and driver-facing (140°) cameras | Integrated Cellular communication | Wi-Fi | BT | Octa-Core processor | Heavy and Light Vehicle Bus support | Android 9 | Wide range of vehicle and peripheral interface support | Internal speaker & Mic | CAN (J1708/J1939) | GPIO | SD Card | USB



# Micronet SmartCam

Innovative Android OBC with integrated Video Telematics features for advanced Fleet Management solutions



	Basic (V1)	Premium (V2)
CANBUS	X	J1939/J1708
Cellular	X	4G LTE
USB	Debug / Download	Hub (OTG)
Memory	2GB/16GB	3GB/32GB





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Innovative Android OBC with integrated Video Telematics features for advanced Fleet Management solutions



# Models

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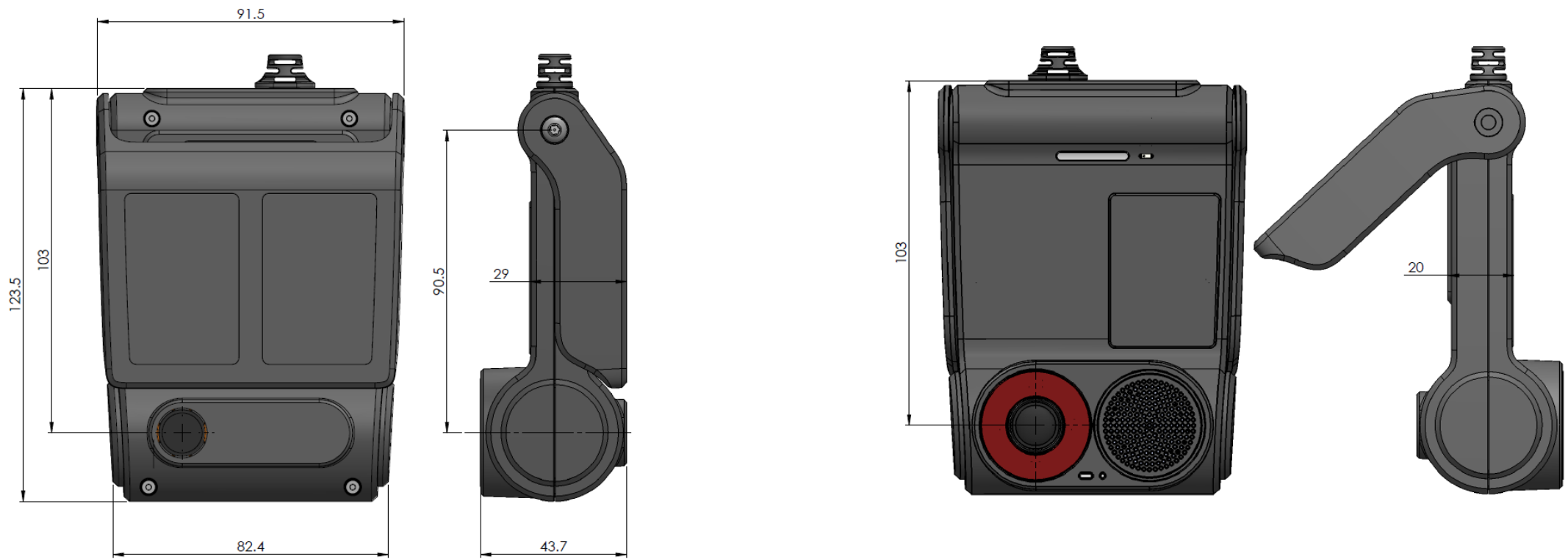
# Installation



# SmartCam



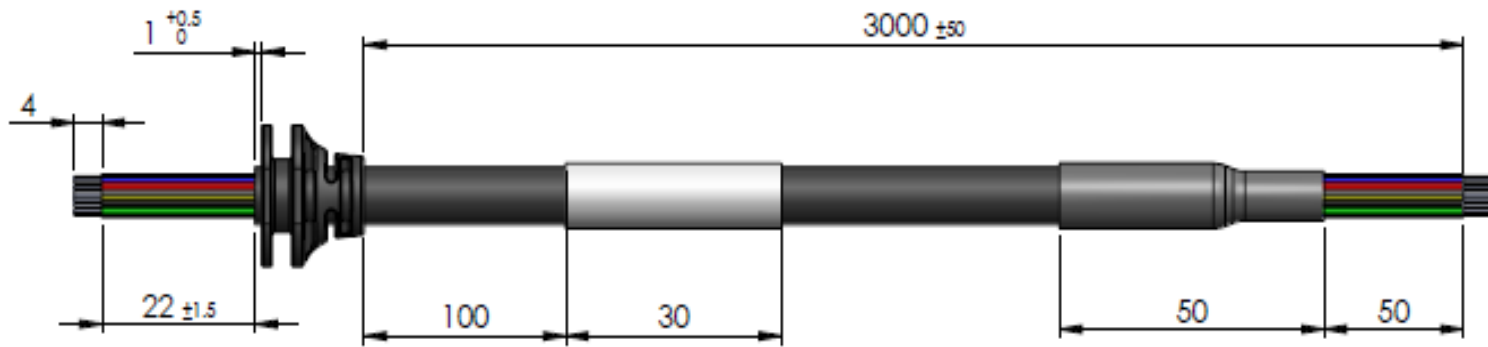
# Dimensions







# Cables



Standard cable (GCAB616):

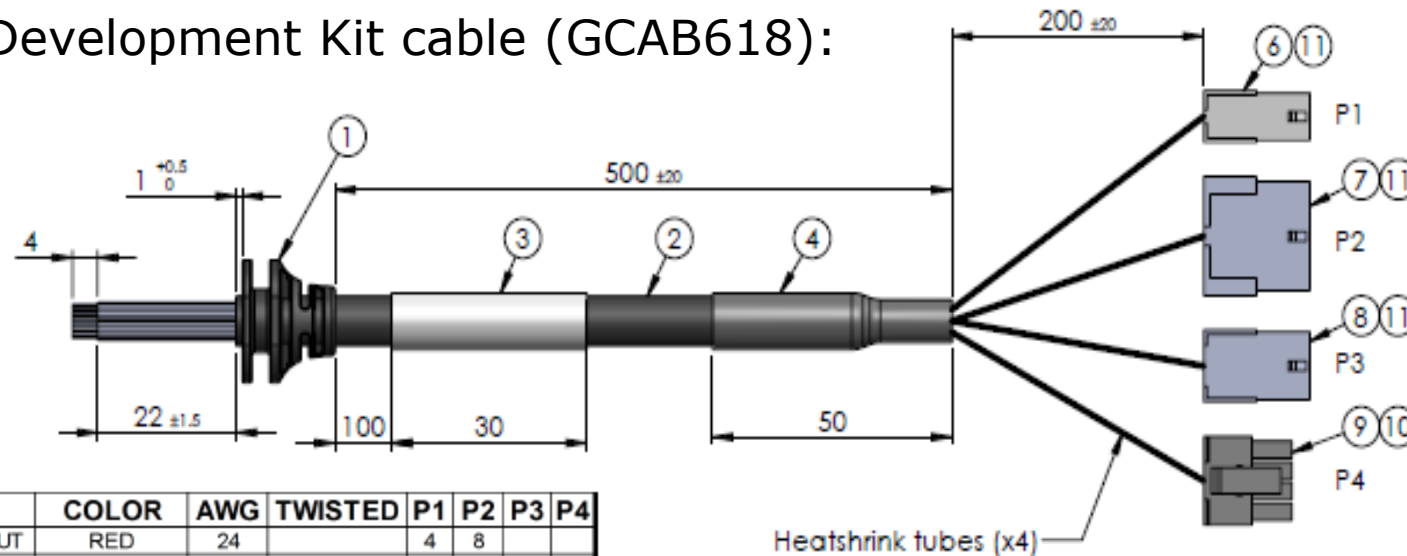
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1	POWER_INPUT	RED	24
2	POWER_GND	BLACK	24
3	IGNITION	YELLOW	24
4	GND	BLACK/RED	24
5	GP_IN	BROWN	24
6	GP_OUT	PURPLE	24
7	RS232_TX	RESEDA	24
8	RS232_TX_DBG	BLUE	24
9	RS232_RX_DBG	PINK	24
10	GND	BLACK/WHITE	24
11	RS232_RX	WHITE/RED	24
12	GP_IO	ORANGE	24

Enhanced cable (GCAB617):

	SIGNAL	COLOR	AWG	TWISTED	SHIELD
1	POWER_INPUT	RED	24		
2	POWER_GND	BLACK	24		
3	IGNITION	YELLOW	24		
4	CAN1_P	GRAY	24	T1	
5	CAN1_N	WHITE	24	T1	
6	J1708_P/CAN2_P	RED/BLACK	24	T2	
7	J1708_N/CAN2_N	GREEN	24	T2	
8	GP_OUT	ORANGE	24		
9	RS232_TX	RESEDA	24		
10	RS232_TX_DBG	BLUE	24		
11	RS232_RX_DBG	PINK	24		
12	GND	BLACK/RED	24		
13	RS232_RX	ORANGE/RED	24		
14	GP_IN	WHITE/BLACK	24		
15	GP_IO	BROWN	24		
16	SWC	PURPLE/RED	24		

# Development cable

SmartCam Development Kit cable (GCAB618):

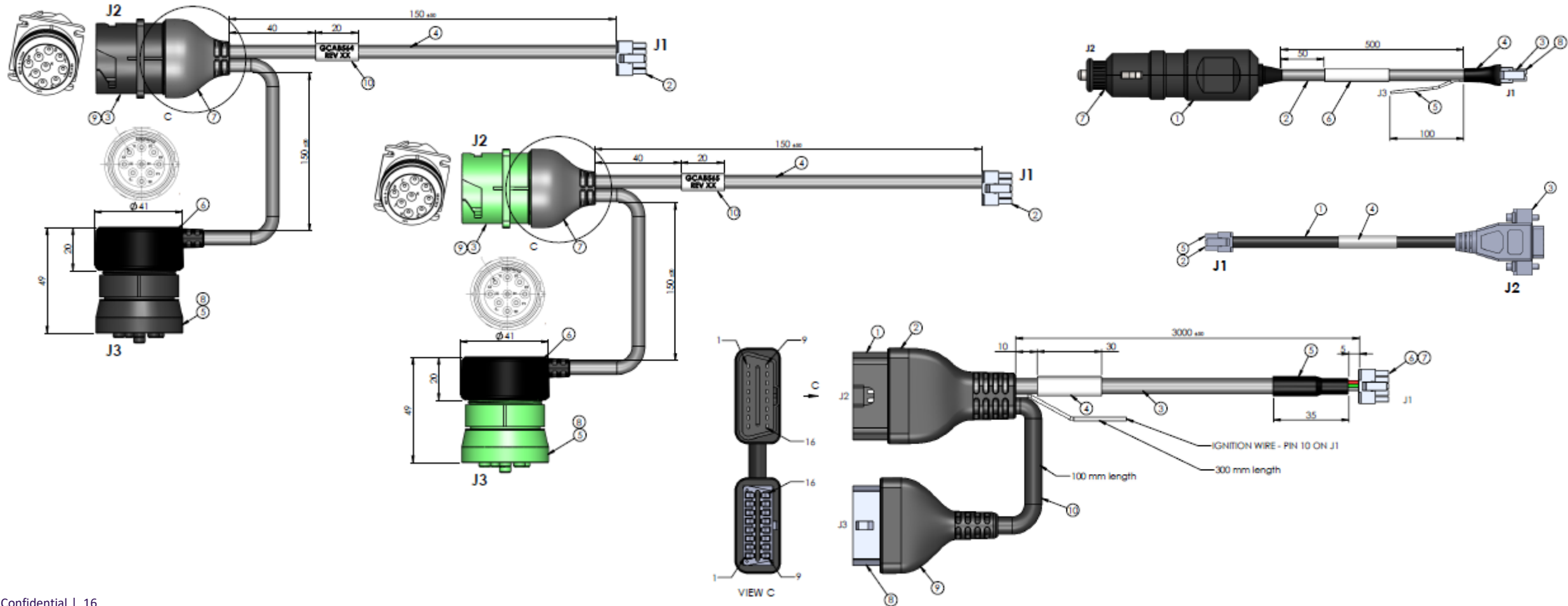


SIGNAL	COLOR	AWG	TWISTED	P1	P2	P3	P4
POWER_INPUT	RED	24		4	8		
POWER_GND	BLACK	24		3	7		
IGNITION	YELLOW	24		1	10		
CAN1_P	GRAY	24	T1		1		
CAN1_N	WHITE	24	T1		2		
J1708_P/CAN2_P	RED/BLACK	24	T2		3		
J1708_N/CAN2_N	GREEN	24	T2		4		
GP_OUT	ORANGE	24				2	
RS232_TX	RESEDA	24				4	
RS232_TX_DBG	BLUE	24					2
RS232_RX_DBG	PINK	24					1
GND	BLACK	24				6	3
RS232_RX	ORANGE	24				5	
GP_IN	WHITE/BLACK	24				1	
GP_IO	BROWN	24				3	
SWC	PURPLE	24			9		

Development kit extension cables:

Function	Extension cables available	
Power\Ignition	GCAB987	Ignition switch
	GCAB977	Lighter connector
CAN\1708\SWC	GCAB564	J1939 Type I Plug\Receptable
	GCAB565	J1939 Type II Plug\Receptable
	GCAB576	OBDII Male\Female
RS232\IO	GCAB562	9-Pin DSUB
RS232 Debug	GCAB563	9-Pin DSUB

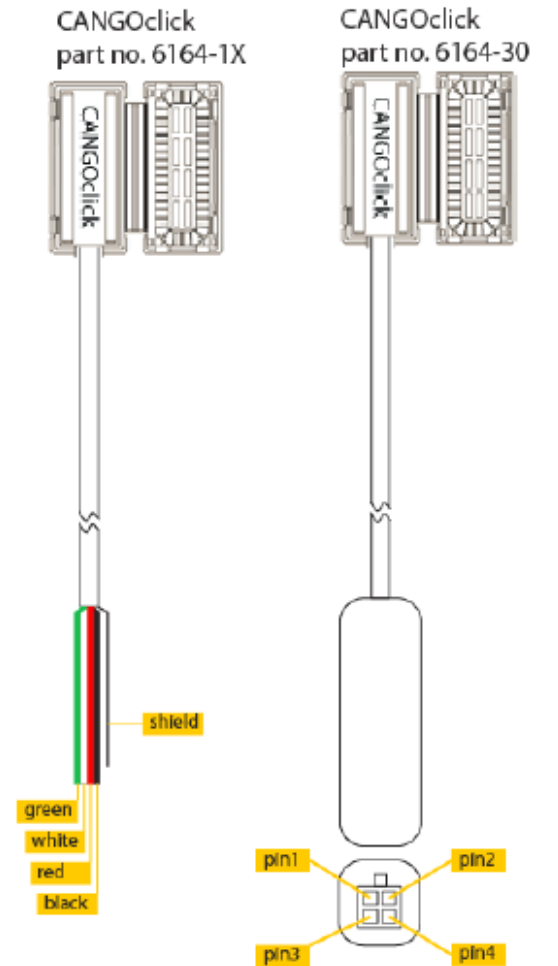
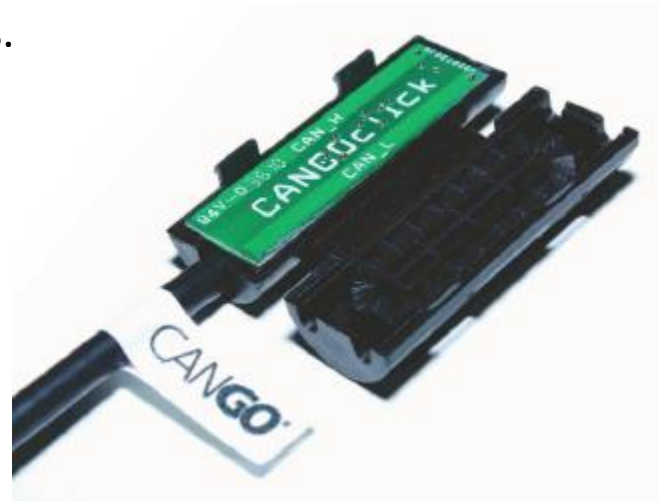
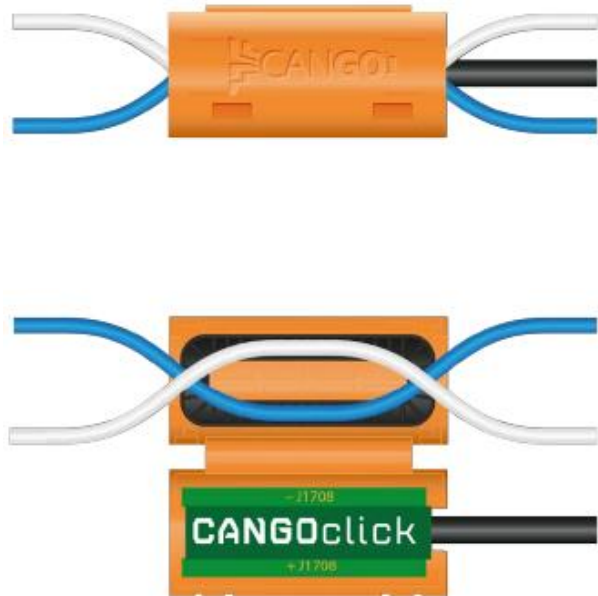
# Extension cables





# Extension cables

CANGOclick reads vehicle signals **without making a wire to wire connection**. This technology guarantees that **No intrusive signals are sent to the vehicle CANbus or J-bus**. This eliminates liability matters, warranty issues or wrong





Installation

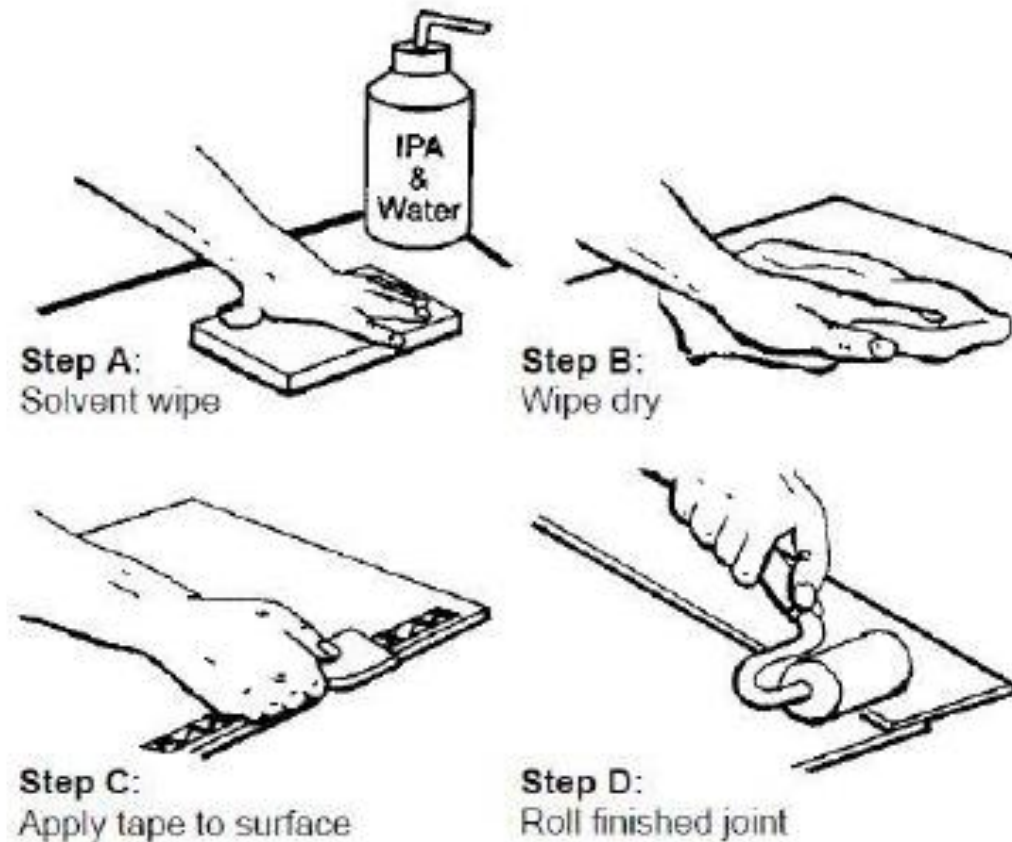
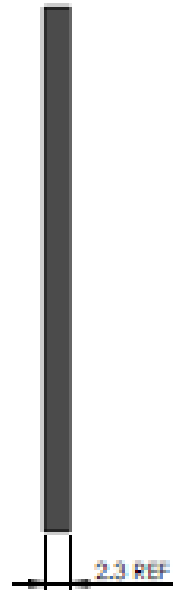
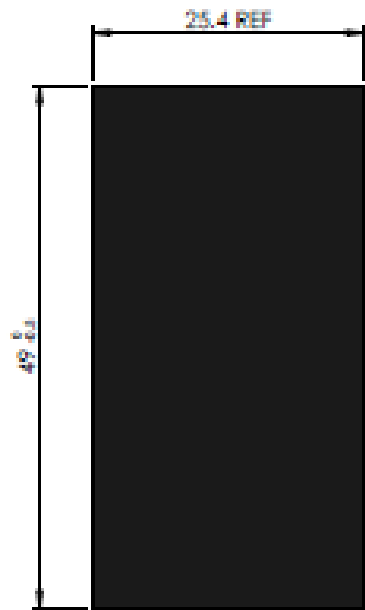
# WINDSHIELD INTERFACE

- Every 8 deg. Click turn positioning.
- Two 3M VHB 4991 Adhesive Pads.

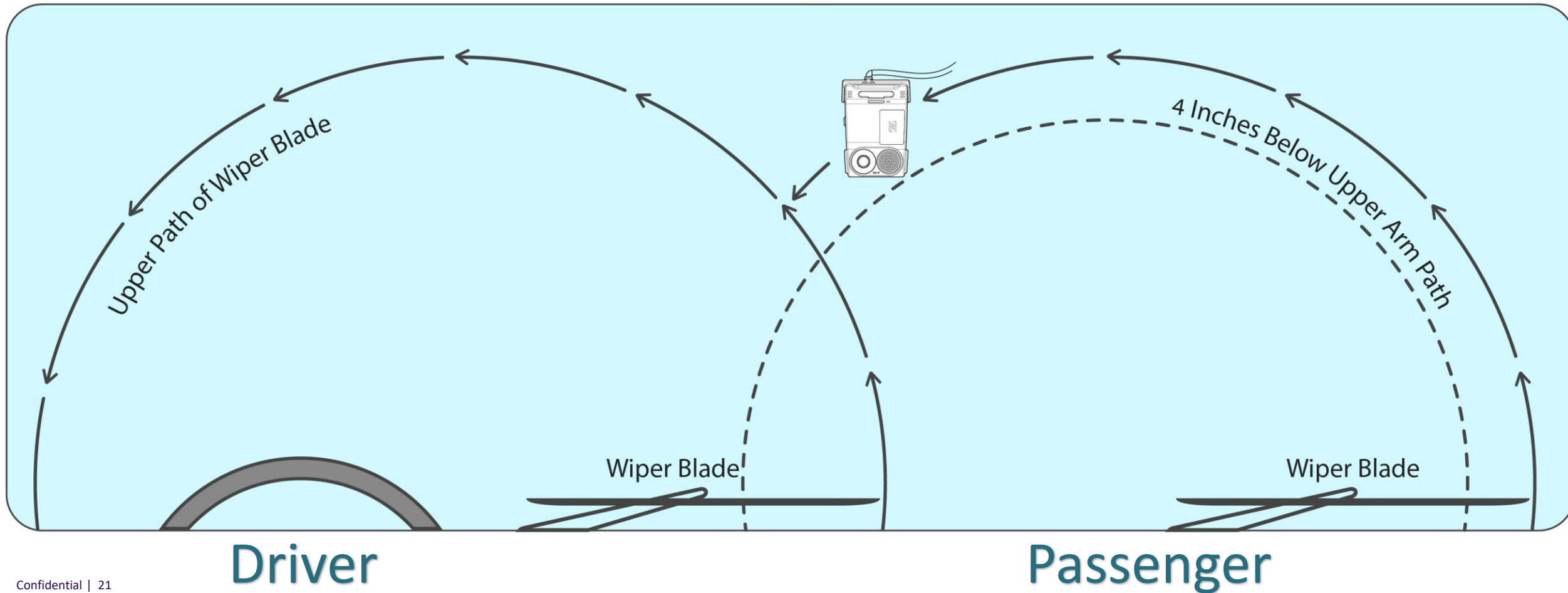


# Double sided foam tape

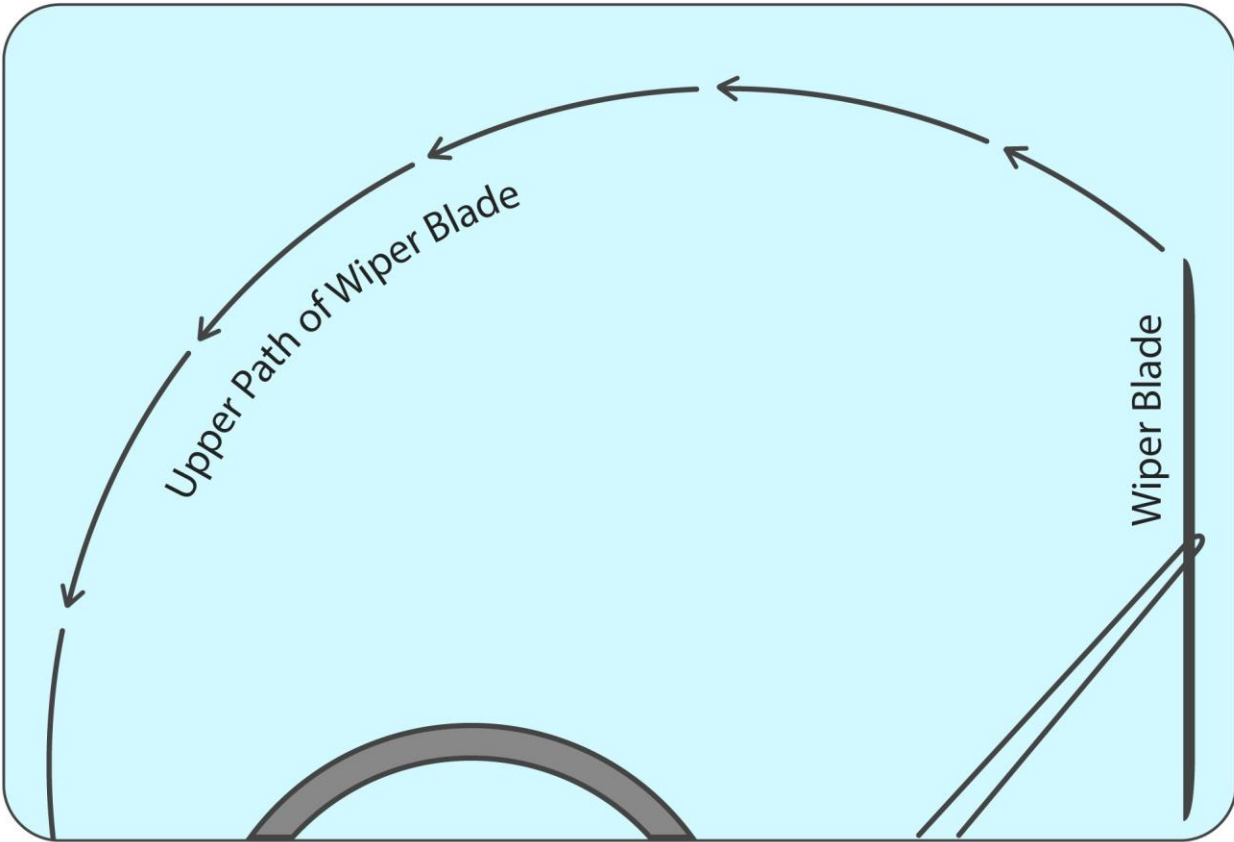
- 3M™ VHB™ Tape 4991.



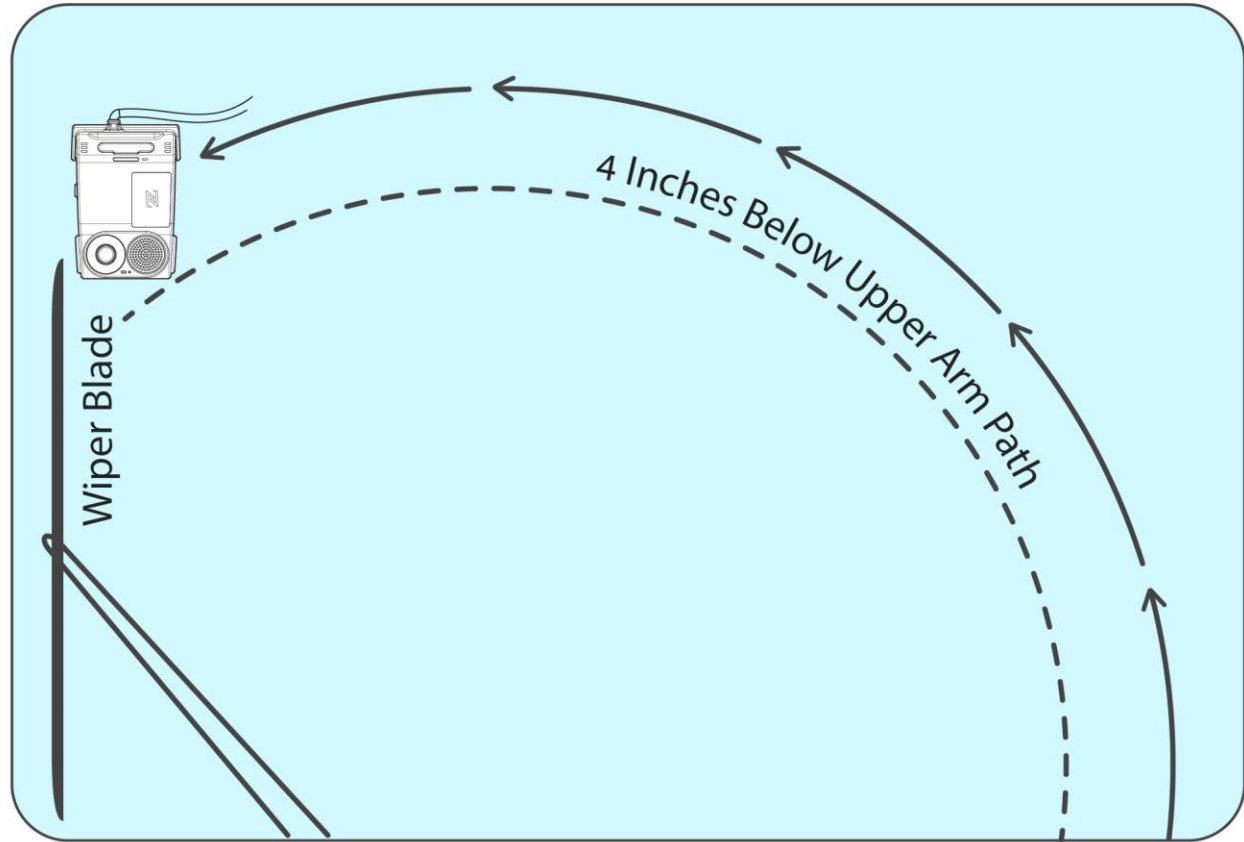
# Windshield Installation (std. window)



# Windshield Installation (split window)



Driver



Passenger



# Installation





# Installation

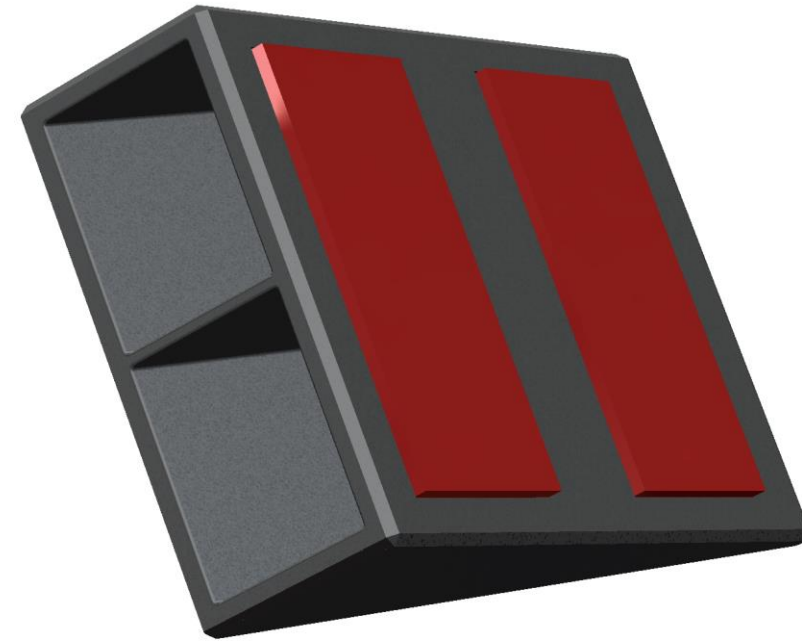


# Accessories

- Windshield adaptor for angled\split-pane windshield
- Dual cam cover
- Driver cam cover



# Accessories - Windshield adaptor



# Accessories - Dual cam cover



# Accessories - Driver cam cover



## CE Statement

### Regulatory Conformance

Hereby, we (Micronet) declares that the radio equipment type SmartCam (A) series are in compliance with Directive 2014/53/EU.



### RF exposure

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

This device may be operated in all member states of the EU.

Observe national and local regulations where the device is used.

This device is restricted to indoor use only when operating in the 5150 to 5250 MHz, frequency range in the following countries:

AT	BE	BG	HR	CY	CZ	DK	
EE	FI	FR	DE	EL	HU	IE	
IT	LV	LT	LU	MT	NL	PL	
PT	RO	SK	SI	ES	SE	UK(NI)	
IS	LI	NO	CH	TR			

**Product Marketing Name (PMN): Micronet SmartCam (A)      FCC ID: U80-SC    IC ID: 12186A-SC**

**FCC Regulations**

Micronet SmartCam 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, under 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 by 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 into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC RF Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF exposure compliance requirements, this grant applies to only Mobile Configurations. The antennas used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

**IRSS-GEN**

"This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device." or "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; 2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement." Déclaration sur l'exposition aux rayonnements RF L'autre utilisateur pour l'émetteur doit être installé pour fournir une distance de séparation d'au moins 20 cm de toutes les personnes et ne doit pas être colocalisé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.

- a. The device shall automatically discontinue transmission in cases of absence of information to transmit, or operational failure.
- b. devices contain security features to protect against modification of software by unauthorized parties the device for operation in the band 5150 – 5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;Footnote 4 for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit; for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

**ISED RF Radiation Exposure Statement**

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. To comply with ISED RF exposure compliance requirements, this grant applies to only Mobile Configurations. The antennas used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.



# MICRONET – THE FUTURE OF IN-VEHICLE TELEMATICS

