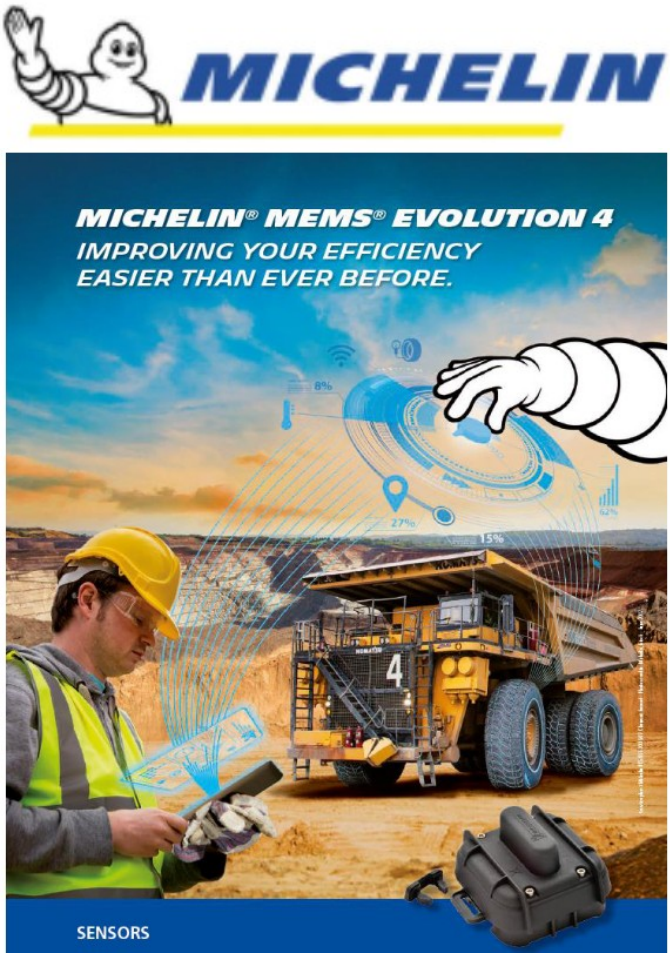
MICHELIN Mems Evolution 4 Liquid Proof Sensor Owner's Manual



PRODUCT NOTICE

Contents

PRODUCT NAME MEMS

EVOLUTION-4 LIQUID PROOF SENSOR — Part Number CA1564947

PRODUCT DESCRIPTION

The MEMS EVOLUTION-4 LIQUID PROOF SENSOR is a battery powered air pressure and air temperature sensor designed to operate inside tubeless earthmover tires.
This information is sent, via a radio transmitter, to a MEMS EVOLUTION-4 TRANSCEIVER unit, which is usually mounted in the cab of the vehicle.

FCC / IC CERTIFICATION

Model: RV1-30 FCC ID: F15-RV1-30G HVIN: RV1-30 IC: 5056A-RV130G
PMN: MEMS EVOLUTION 4 LIQUID PROOF SENSOR
Federal Communications Commission (FCC) Statement 15.19 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. 15.195(a) This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 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 in stalled and used in accordance with the instruction manual, 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.'
'15.21 You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment."
'FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter."
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 29 centimeters between th e radiator and your body.

   Devices shall not be used for control of or communic ations with unmanned aircraft systems.

Caution: Exposure to Radio Frequency Radiation

1. To comply with the Canadian RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter."
2. To comply with RSS 192 RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

PRODUCT SPECIFICATION

Physical Characteristics

- Approximate dimensions: L= 80mm. W= 70mm. H=50mm
- Approximate weight: 110g Storage Conditions
- Storage temperature: -40°C to +60°C, -40°F to + 140°F Performance Characteristics
- Normal transmission period: 60 seconds + 10 seconds
- Fast transmission period 16 seconds
- Tire compatibility: 49″ to 63″ earthmover tubeless tires
- Pressure resolution: lkPa, 0.01 bar, 0.145 psi
- Typical pressure accuracy: ± 30kPa, ± 0.3 bar, ± 4.35 psi (-20 to + 90°C, -4 to + 194°F)
- Temperature resolution: 1°C, – 1.8°F
- Typical temperature accuracy: ± 2 °C, ± 3.6°F (- 20 to + 90°C, -4 to + 194°F) RF Performance
- TX frequency: 433.92MHz ISM band
- RF output power: 86.48 dBuV/m @ 3m (Peak) as per FCC 15.231(b)
- RF data rate 5kHz
- Modulation : FSK
- Antenna: Internal helical
- With duty cycle correction as per FCC part 15.35 Electrical Performance
- Batteries: 1 x Li-metal coin cell
- Lithium content: 0.16g Operating Conditions
- Operating temperature range: -20°C to +125°C; -4°F to + 257°F
- Operating pressure range: 100kPa to 140t stAkcjarkiprig14 Now bar Absolute; 14.51 psi to 203.05 psi Absolute Environment

DISPOSAL

The MEMS EVOLUTION-4 LIQUID PROOF SENSOR must not be disposed of in landfill.
At the end of its life, the MEMS EVOLUTION-4 LIQUID PROOF SENSOR must be removed from the tire and deposited in a container dedicated to the recycling of electronic equipment that contains batteries. If users do not have access to the appropriate recycling facility, your local Michelin MEMS representative is able to provide a container dedicated to the purpose of collecting MEMS equipment.

CONTACT DETAILS — Technical Support

For more information or assistance, please contact the Michelin MEMS representative for your country.
Brasil, Chile & Pertl : +55 (21) 36 21 4646 USA,
Canada & Mexico : +1 864 458 5000
Australia : +61 3 86 71 1003
South Africa : +27 115 790 300
Russia : +7 495 258 09 26
China : +86 21 22855000

 services.mining@michelin.com

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The product must not be disposed of with unsorted waste, but must be sent to separate collection facilities for recovery and recycling Features, specifications are subject to change without notification. Document version 17.0

Documents / Resources

	MICHELIN Mems Evolution 4 Liquid Proof Sensor [pdf] Owner's Manual RV1-30G, FI5-RV1-30G, FI5RV130G, Mems Evolution 4, Liquid Proof Sensor, Mems Evolution 4 Liquid Proof Sensor, Sensor