

1 EC-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC**

3 **EC-Type Examination Certificate No:** FM08ATEX0007

4 **Equipment or protective system:** Model 010041 Viator Bluetooth Interface
(Type Reference and Name)

5 **Name of Applicant:** MACTek Corporation

6 **Address of Applicant:** 7380 Stoneham Rd
Gates Mills OH 44040 USA

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Ltd, notified body number 1725 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3030621EC dated 27th June 2008

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0: 2012 and EN 60079-11: 2012

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EC-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 1 G Ex ia IIC T4 Ta = -20°C to 50°C;



Mick Gower
ou=Mick Gower, ou=FM Approvals, ou,
email=mick.gower@fmaprovals.com,
c=GB
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Mick Gower
Certification Manager, FM Approvals Ltd.

Issue date: 11th December 2014

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS
T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: atex@fmaprovals.com www.fmaprovals.com

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SCHEDULE



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to EC-Type Examination Certificate No. FM08ATEX0007

13 Description of Equipment or Protective System:

The Model 010041 Viator Bluetooth Interface is a wireless communication device for use with an ATEX certified HART enabled field device. The interface converts and transmits the electrical HART signal via a 2.4GHz radio wave to another location.

The Model 010041 Viator Bluetooth Interface is contained on one main printed circuit board. The printed circuit board contains a 2.4GHz piggy back radio board. The apparatus is powered by three internal "AAA" alkaline batteries in series to deliver a nominal 4.5V to the circuitry. The "AAA" batteries tested for use with the Model 010041 Viator Bluetooth Interface are the Energizer Industrial EN92 alkaline. The Model 010041 Viator Bluetooth Interface contains two clip leads for connection to a HART signal.

The Model 010041 Viator Bluetooth Interface circuitry is contained inside of a polymeric handheld housing approximately 2¾" by 1½" by ¾". The polymeric material is specified to be Polycarbonate THE-CON(5-9) 14-000-FR manufactured by THEMIX Plastic, Inc. Two leaded wires, approximately 17" long, extrude through the housing to the clips used for connection to the HART signal.

010041. Viator Bluetooth Interface.

Energy Limitation Parameters:

$U_i = 30V$, $I_i = 130mA$, $P_i = 1W$, $C_i = 0\mu F$, $L_i = 0mH$.

$U_o = 1.7V$, $I_o = 2.5mA$, $P_o = 1.1mW$, $C_o = 100\mu F$, $L_o = 1H$.

14 Specific Conditions of Use:

None

15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

16 Test and Assessment Procedure and Conditions:

This EC-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

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T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: atex@fmapprovals.com www.fmapprovals.com

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18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
02 nd July 2008	Original Issue.
27 th August 2009	<u>Supplement 1:</u> Report Reference: – Supplement 1 to report No. 3030621EC dated 27 th August 2009. Description of the Change: Minor changes to documentation not affecting safety.
11 th December 2014	<u>Supplement 2:</u> Report Reference: – 3050599 dated 10 th December 2014. Description of the Change: Updated standards. Minor changes to circuit and changes to documentation. Standard 60079-26 removed since it is covered by 60079-11. Updated name and part number of plastic enclosure to keep it up to date with the part number assigned by the new manufacturer.



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T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: atex@fmapprovals.com www.fmapprovals.com

Blueprint Report

MACTek Corporation (116305)

Class No 3610

Original Project I.D. 3030621

Certificate I.D. FM08ATEX007

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
AF01004100	DA	Viator Bluetooth Interface Final Assembly	3050599	Yes (pdf)
AF0100411B	EA	Viator Bluetooth Interface Final Assembly Bill of Material	3050599	Yes (pdf)
AM01004100	EA	Viator Bluetooth Interface Bottom House Assembly	3050599	Yes (pdf)
AM0100411B	CA	Viator Bluetooth Interface Bottom House Assembly Bill of Material	3050599	Yes (pdf)
AP01004100	DA	Viator Bluetooth Interface PCB Assembly Drawing	3050599	Yes (pdf)
AP0100411B	DA	Viator Bluetooth Interface AP01004100 PCB Assembly BOM	3050599	Yes (pdf)
AT0100410C	AC	Viator Bluetooth Interface Control Drawing	3030621	Yes (pdf)
AT0100411B	DF	VIATOR Bluetooth Interface TOP LEVEL BOM	3050599	Yes (pdf)
DL01004100	CA	Viator Bluetooth Interface 010041 Front Label	3050599	Yes (pdf)
DL01004200	CA	Viator Bluetooth Interface 010041 Rear Label	3050599	Yes (pdf)
DL01004300	AB	Serial Number Label	090629	Yes (pdf)
DM0100410U	AG	Viator Bluetooth Interface for use with HART Devices User's Manual	3050599	Yes (pdf)
HC01004100	DA	Viator Bluetooth Interface Top Cover Housing	3050599	Yes (pdf)
HC01004200	EA	Bottom Cover Housing	3050599	Yes (pdf)
HC01004300	CA	Viator Bluetooth Interface Battery Door Housing	3050599	Yes (pdf)
PW01004100	EB	Viator Bluetooth Interface PCB Bare	3050599	Yes (pdf)
PW01004110	EB	Viator Bluetooth Interface PCB Assy, AP01004100	3050599	Yes (pdf)
PW01004130	EB	Gerber PDF PW01004130EB	3050599	Yes (pdf)
US01004100	AA	BT Model Module Assembly	3030621	Yes (pdf)
US01004110	AB	BT Model Module Assembly	3030621	Yes (pdf)
US0100411B	AB	Bluetooth Module Assembly Bill of Material	3030621	Yes (pdf)