



**OMRON SCIENTIFIC TECHNOLOGIES INCORPORATED**  
***EC Declaration of Conformity***

OMRON Scientific Technologies Incorporated (at 6550 Dumbarton Circle, Fremont, CA 94555-3605, U.S.A.), hereby declares that the following series manufactured products listed below conform with the relevant Essential Health and Safety Requirements (EHSRs) of the European **Machinery Directive** (2006/42/EC), with the relevant requirements of the **Low Voltage Directive** (2006/95/EC), with the essential protection requirements of the **Electromagnetic Compatibility (EMC) Directive** (2004/108/EC), and with the **RoHS Directive** (2002/95/EC) - the restriction of the use of certain hazardous substances in electrical and electronic equipment.

**PA4600 Series, Perimeter Access (Single & Multiple Beam Safeguard)**

The PA4600 Series devices are electro-sensitive protection equipment, Type 4, designed to detect persons as part of a safety related system.

The PA4600 Series products have been type-examined per

**EC Type-Examination Certificate, Registration No.: 01/205/0733/10,**

**issued by notified body TUV Rheinland Industrie Service GmbH, Alboinstr. 56, 12103 Berlin/Germany, Certification Body for Machinery (NB No. 0035).**

The following Standards were used to form the basis for the requirements and tests:

**EN 61496-1:2004 + A1:2008** - Safety of machinery – Electro Sensitive Protective Equipment, Part 1: General requirements and tests.

**IEC 61496-2:2006** - Safety of machinery – Electro Sensitive Protective Equipment, Part 2: Particular Requirements using Optoelectronic Protective Devices.

**EN ISO 13849-1:2008** - Safety of machinery – Safety-related parts of control systems, Part 1: General principle for design.

**EN 60204-1:2006**: Safety of machinery – Electrical equipment of machines, Part 1: General requirements.

**EN 50178:1997**: Electronic equipment for use in power installations.

**IEC 61508, Parts 1 – 7:1998 – 2000** - Functional Safety Of Electrical/Electronic/Programmable electronic Safety-Related Systems.

**EN 62061:2005** – Safety of machinery. Functional safety of safety-related electrical, electronic and programmable electronic control systems.

Date June 2, 2010

Signed Martin D. Krikorian

Martin D. Krikorian  
Quality Director  
Scientific Technologies, Inc.

Documentation Manager of the EU Office  
OMRON Scientific Technologies, Inc.  
Am Garock 8  
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TÜVRheinland®

ZERTIFIKAT  
CERTIFICATE

EC Type-Examination Certificate

Reg.-No.: 01/205/0733/10

<b>Product tested</b>	Active Opto-electronic Protective Device (AOPD Type 4), Perimeter Access Multiple Beam Safeguard	<b>Certificate holder</b>	OMRON Scientific Technologies, Inc. 6550 Dumbarton Circle Fremont, CA 94555-3605 USA
<b>Type designation</b>	PA4600 Series	<b>Manufacturer</b>	see certificate holder
<b>Codes and standards forming the basis of testing</b>	EN 61496-1:2004 + A1:2008 IEC 61496-2:2006 EN 62061:2005 EN ISO 13849-1:2008 + AC:2009		IEC 61508 Parts 1-7:1998 / 2000 EN 60204-1:2006 EN 50178:1997
<b>Intended application</b>	The devices comply with the requirements of the relevant standards (Type 4 acc. to IEC 61496-1 / -2, Cat. 4 / PL e acc. to EN ISO 13849-1, SIL CL 3 acc. to EN 62061 / IEC 61508) and can be used in applications up to Cat. 4 / PL e acc. to EN ISO 13849-1 and SIL 3 acc. to EN 62061 / IEC 61508.		
<b>Specific requirements</b>	The instructions of the associated Installation and Operating Manual shall be considered.  Protection width: 0.8m - 70m,  Max. response time: 24ms		
It is confirmed, that the product under test complies with the requirements for machines defined in Annex I of the EC Directive 2006/42/EC.			
This certificate is valid until 2015-02-17.			

The test report-no.: 968/M 156.08/10 dated 2010-02-17 is an integral part of this certificate.

This certificate is valid only for products which are identical with the product tested. It becomes invalid at any change of the codes and standards forming the basis of testing for the intended application.



Berlin, 2010-02-17

Certification Body for Machinery, NB 0035

Dipl.-Ing. Eberhard Frejno



## NIPF.E206571 Active Opto-electronic Protective Devices

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### Active Opto-electronic Protective Devices

[See General Information for Active Opto-electronic Protective Devices](#)

**OMRON SCIENTIFIC TECHNOLOGIES INC**  
6550 DUMBARTON CIR  
FREMONT, CA 94555 USA

E206571

**Type 2, light curtain system**, MiniProtect Series MP2100+; Model MP21 followed by suffixes to indicate coverage height and configuration options.

**Type 4, light curtain**: Model Series 4600+; Models MS46, OF46 followed by additional suffixes , may include modules RM-1, RM-2, RM-3 or RM-4 .

**Type 4, light curtain system**: Series 4700+; Model MC47, MS47, MCF47, MCJ47 or MS46 followed by S, R, SR, SRS or TB, followed by 12, 20 or 30, followed by xxxx, followed by LCM1, LCM2 or LCM3 or LCMxxx, followed by 3X, 10X or 30X, followed by 3R, 10R or 3.

**Type 4, light curtain system** consisting of Transmitter and Receiver, Series PA46+, 1-000, 2-500, 2-600, 3-400, 3-500, 4-300, 5-300 or 6-300, may be followed by Q2, followed by NO1, NO2, NC1 or NC2, followed by NP or PN, may be followed by M.

**Type 4, light curtain system** consisting of single light stick containing Transmitter and Receiver, and a passive stick containing reflective mirrors, Series PA46-BB-2+, followed by 500 or 600.

**Type 4 Light Curtain system** consisting of Transmitter and Receiver, 4800+ Series, Model MS or MSF followed by 4800, followed by A, B or S, may be followed by additional numbers and/or letters, may include RM6 Mute Module and PDM (Programmable Diagnostic Module).

+ -Also investigated to UL 1998, the Standard for Safety Related Software.

# OMRON

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## Active Opto-electronic Protective Devices Certified for Canada

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## Active Opto-electronic Protective Devices Certified for Canada

[See General Information for Active Opto-electronic Protective Devices Certified for Canada](#)

**OMRON SCIENTIFIC TECHNOLOGIES INC**  
 6550 DUMBARTON CIR  
 FREMONT, CA 94555 USA

E206571

**Type 2, light curtain system**, MiniProtect Series MP2100+; Model MP21 followed by suffixes to indicate coverage height and configuration options.

**Type 4, light curtain system**: Model Series 4600+; Models MS46, OF46 followed by additional suffixes, may include modules RM-1, RM-2, RM-3 or RM-4 .

**Type 4, light curtain system**: Series 4700+; Model MC47, MS47, MCF47, MCJ47 or MS46 followed by S, R, SR, SRS or TB, followed by 12, 20 or 30, followed by xxxx, followed by LCM1, LCM2 or LCM3 or LCMxxx, followed by 3X, 10X or 30X, followed by 3R, 10R or 3.

**Type 4, light curtain system** consisting of Transmitter and Receiver, Series PA46+, 1-000, 2-500, 2-600, 3-400, 3-500, 4-300, 5-300 or 6-300, may be followed by Q2, followed by NO1, NO2, NC1 or NC2, followed by NP or PN, may be followed by M.

**Type 4, light curtain system** consisting of single light stick containing Transmitter and Receiver, and a passive stick containing reflective mirrors, Series PA46-BB-2+, followed by 500 or 600.

**Type 4 Light Curtain system** consisting of Transmitter and Receiver, 4800+ Series, Model MS or MSF, followed by 4800, followed by A, B or S, may be followed by additional numbers and/or letters, may include RM6 Mute Module and PDM (Programmable Diagnostic Module).

+ Also complies with UL 1998, the Standard for Safety Related Software.

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# Certificate of Compliance

**Certificate:** 1485610 (LR 90200)

**Master Contract:** 156365

**Project:** 1881503

**Date Issued:** 2007/02/16

**Issued to:** OMRON Scientific Technologies Inc

6550 Dumbarton Cir  
Fremont, CA 94555-3611  
USA  
Attention: Doug Barnett

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



**Issued by:** Rob Hempstock, AScT.

**Authorized by:** Lindsay Clark, Product Group Manager

## **PRODUCTS**

**CLASS 4812 05** - SIGNAL APPLIANCES - Systems

**CLASS 4812 85** - SIGNAL APPLIANCES - Systems - Certified to US Standards

Electro-optic presence sensing system, series **PA4600**, used for whole body detection, indoors, consisted of a transmitter and a receiver, rated:

Receiver: 24 Vdc + 20%, 1.6 A

Transmitter: 24 Vdc + 20%, 100mA

Note: The certification covers electrical safety only.

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.



**Certificate:** 1485610 (LR 90200)

**Master Contract:** 156365

**Project:** 1881503

**Date Issued:** 2007/02/16

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**APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No 205-M1983 (R2004) - Signal Equipment

UL 508 (17th Edition) - Industrial Control Equipment



CSA INTERNATIONAL

## *Supplement to Certificate of Compliance*

**Certificate:** 1485610

**Master Contract:** 156365

*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
1881503	2007/02/16	Update Report 1485610 to Include Company Name Change.
1485610	2003/10/24	Perimeter Access Optical Sensing Device, PA4600.

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