

TYPE EXAMINATION CERTIFICATE



- [2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**
- [3] Type Examination Certificate Number: **DEMKO 14 ATEX 1379X Rev. 2**
- [4] Product: **Flat Panel Monitors, Models DM512, DM515, DM519, DM521 and DM522**
- [5] Manufacturer: **Pepperl+Fuchs GmbH**
- [6] Address: **Lilienthalstrasse 200, 68307 Mannheim, Germany**
- [7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.
- The examination and test results are recorded in confidential report no. **4788266980 3.1**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 60079-0:2012+A11:2013 EN 60079-15:2010**
- except in respect of those requirements listed at item 18 of the Schedule.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.
- [12] The marking of the product shall include the following:

 **II 3 G Ex nA IIC T4 Gc**

(Models with screen type option "A0" or "N0")

 **II 3 G Ex nA nC IIC T4 Gc**

(Models with screen type option "TA", "T0" or "TH")

Certification Manager
Jan-Erik Storgaard



This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2014-11-20

Re-issued: 2019-04-24



Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Schedule

TYPE EXAMINATION CERTIFICATE No.

DEMKO 14 ATEX 1379X Rev. 2

[13]

[14]

[15] Description of Product:

This certificate covers Flat Panel Monitors Models DM512, DM515, DM519, DM521 and DM522. These devices are monitors that are intended for installation into a panel or suitable enclosure. The only accessible portion of the computer to the end-user is the Display, which can be a touch screen.

Nomenclature:

DM5XX	-	T0	V3	SS	NT
I		II	III	IV	V

Part	Description	Designation	Designation Description
I	Series	DM512	12.1 in., SVGA (800 x 600 pixel)
	Designation:	DM515	15 in., XGA (1024 x 768 pixel)
	Monitor Type:	DM519	19 in., SXGA (1280 x 1024 pixel)
	Display Size:	DM521	21.5 in., Full HD (1920 x 1080 pixels)
		DM522	22 in., WSXGA (1680 x 1050 pixel)
II	Screen Type	TA	Touchscreen, Resistive with Antiglare
		T0	Touchscreen, Resistive
		TH	Touchscreen, Resistive with Antiglare, Hardened
		A0	No Touchscreen, Antiglare,
		N0	No Option (Tempered Glass)
III	Location for use	V3	ATEX/IECEX
IV	Housing Version	SS	Stainless Steel
		EN	Enclosed
		CM	Chassis Mount
		OM	OEM
		EL	Enclosed, No Logo
		N0	No Option
		RM	Rack Mount
		SL	Stainless no logo
		NL	Standard no logo
		XX	2-digit alphanumeric code reflecting an option non-safety related.
V	Options	NT	NTSC Input
		PT	Special Drop-In replacement
		N0	No Option
		HB	High Brite
		NH	NTSC Input, LED Backlight, High Brightness
		PH	Special Drop-In replacement
		XX	2-digit alphanumeric code reflecting an option non-safety related.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is not covered in this certificate..

Temperature range

Ambient temperature range
-20°C to +55°C

Temperature class
T4

Electrical data

Model Series	Voltage Rating	Current Rating
DM512	12V dc	1.2 A
DM515		2.5 A
DM519		3.8 A
DM521		4.1 A
DM522		4.4 A

Schedule

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Routine tests:
None

[14]

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

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Special Conditions of Use:

- The devices shall be mounted in an ATEX certified enclosure with a minimum ingress protection rating of at least IP54 and used in an area of not more than pollution degree 2 as defined in EN 60664-1.
- The enclosure must utilize a tool removable cover or door.
- Provision shall be made external to the equipment to provide transient protection at a level not exceeding 119V at the power supply terminals.
- The standard 5-wire resistive touch-screen ("TA", "T0" or "TH" option) has not been evaluated for potential damage from UV exposure. Therefore, installation is restricted against direct exposure to sunlight is required. Examples of acceptable installations include indoor applications away from direct sunlight; outdoor applications with shading to prevent direct sunlight; etc. Regular inspections are necessary to check for deterioration of the touch-screen. Return the VISUNET apparatus to factory for repair or replace the VISUNET apparatus if damage is detected.

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Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The Models DM512, DM515, DM519, DM521 and DM522 have in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.