

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**
Directive 2014/34/EU

3 EU - Type Examination Certificate Number: **Baseefa17ATEX0003X**

4 Product: **APT3500(IS) Smart Pressure Transmitter**

5 Manufacturer: **DUON System Co. Ltd.**

6 Address: **298-29, Gongdan-ro, Gunpo-si, Gyeonggi-do, 15809, Korea**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 the Directive.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR17.0001/00**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-11:2012

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 EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following :

⊕ II IG Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +70°C)

⊕ II IG Ex ia IIC T5 Ga (-40°C ≤ Ta ≤ +40°C)

SGS Baseefa Customer Reference No. **7509**

Project File No. **15/0899**

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R S SINCLAIR
TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number Baseefa17ATEX0003X**

15 **Description of Product**

The APT3500(IS) Smart Pressure Transmitter is a microprocessor based high performance transmitter capable of being configured to measure a wide range of Differential; Gauge; or Absolute pressure.

The equipment comprises of an aluminium alloy housing containing a stack of five PCBs; an LCD viewable through a tempered glass window; a pressure sensing element (capacitance or piezo electric sensor); and the required process connections. The transmitter measures approximately 210mm x 90mm x 115mm and weighs approximately 3.5kg.

Electrical connections are made via screw terminals in the terminal chamber located on the opposite face to the display.

The user terminal parameters are:

$U_i = 30V$
 $I_i = 130mA$
 $P_i = 0.75W$
 $C_i = 40nF$
 $L_i = 104\mu H$

16 **Report Number**

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17 **Specific Conditions of Use**

1. The insulation between the intrinsically safe circuits and the frame of the equipment is not capable of withstanding a 500Vrms dielectric strength test as defined in clause 6.3.13 of IEC/EN 60079-11:2011/12. This shall be taken into account during installation.
2. The metal enclosure contains light alloys; the equipment must be protected from impact when installed

18 **Essential Health and Safety Requirements**

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
EX-MD-ASS-3500-STP	1 of 1	0	14.06.25	APT3500(IS) Outline Dimensions
EX-MD-ASS-3500-EPV	1 to 2	0	14.06.25	Smart Pressure Transmitter APT3500 – Exploded View
EX-MD-ASS-3500-BTP	1 of 1	0	14.06.25	APT3500(IS) BC Outline Dimensions
EX-MD-ASS-3500-HTP	1 of 1	0	14.06.25	APT3500(IS) HS Outline Dimensions

Number	Sheet	Issue	Date	Description
EX-MD-ASS-3500-LEC	1 of 1	0	14.06.25	APT3500(IS) – LEC Dimension Drawing
EX-MD-ASS-3500-BLEC	1 of 1	0	14.06.25	APT3500(IS) – LEC (BC) Dimension Drawing
EX-MD-ASS-3500-LED	1 of 1	0	14.06.25	APT3500(IS) – LED Dimension Drawing
EX-MD-ASS-3500-LES	1 of 1	0	14.06.25	APT3500(IS) – LES Dimension Drawing
EX-MD-ASS-3500-BLES	1 of 1	0	14.06.25	APT3500(IS) – LES (BC) Dimension Drawing
EX-MD-ASS-3500-LFC	1 of 1	0	14.06.25	APT3500(IS) – LFC Dimension Drawing
EX-MD-ASS-3500-BLFC	1 of 1	0	14.06.25	APT3500(IS) – LFC (BC) Dimension Drawing
EX-MD-ASS-3500-LFD	1 of 1	0	14.06.25	APT3500(IS) – LFD Dimension Drawing
EX-MD-ASS-3500-LFS	1 of 1	0	14.06.25	APT3500(IS) – LFS Dimension Drawing
EX-MD-ASS-3500-BLFS	1 of 1	0	14.06.25	APT3500(IS) – LFS (BC) Dimension Drawing
EX-MD-ASS-3500-RMT	1 of 1	0	16.01.05	Remote Mount Type
EX-MD-ASS-3500-DMT	1 of 1	0	16.01.05	Direct Mount Type
EX-MD-PT-3500-AIS	1 of 1	1	17.01.09	APT3500 ATEX Intrinsic Safety
EX-MD-PT-3500IIS	1 of 1	1	17.01.09	APT3500 IECEx Intrinsic Safety
EX-MD-ASS-3500-PS	1 of 1	0	14.06.25	APT3500(IS) Power/Signal Connection Wiring
EX-MD-ASS-3500-EML	1 of 2	1	16.09.19	Electronic Model Layout (IS)
EX-MD-ASS-3500-EML	2 of 2	0	16.09.19	APT3500 Method to fix the cable
EX-MD-ASS-3500-DHP	1 of 1	0	14.06.25	Distance between housing and PCB B/D
EX-MD-ASS-3500-TB	1 of 1	0	14.06.25	APT3500(IS) Terminal Block
A-xT-HWSCH-TMB	1 of 3	1.1	16.01.28	Smart Transmitter – Intrinsic Safety Terminal Board
A-xT-HWSCH-ISP	2 of 3	1.1	16.06.21	Smart Transmitter – Intrinsic Safety IS_P Board
A-xT-HWSCH-ISM	3 of 3	1.0	16.01.28	Smart Transmitter – Intrinsic Safety IS_M Board
EL-SCH-IS-LCD	1 of 1	1.0	14.06.04	IS LCD Board (5-digit)
EL-SCH-3500-ANALOG	1 of 1	1.0	14.06.04	APT-3500 Analog Board
EL-SCH-3500-ANALOG(A)	1 of 1	1.1	16.02.01	APT-3500 Analog-A Board
EL-BOM-IS-MCU	1 to 2	6.23	16.08.17	IS MCU Board Part List
EL-BOM-IS-PWR	1 to 3	6.23	16.08.17	IS Power Board Part List
EL-BOM-IS-LCD	1 of 1	6.21	14.06.19	IS LCD Board Part List
EL-BOM-IS-TERMINAL	1 of 1	6.21	16.01.28	IS Common Terminal Board Part List
EL-BOM-3500IS-ANALOG	1 to 2	6.23	16.08.17	3500IS Analog Board Part List
L-BOM-IS-3500IS(A)-ANALOG	1 of 1	6.22	16.03.09	3500IS(A) Analog Board Part List
EL-GBR-IS-TERMINMAL	1 to 4	0	14.04.25	IS Terminal Board Gerber
EL-GBR-IS-PWR	1 to 5	0	14.04.25	IS Power Board Gerber
EL-GBR-IS-MCU	1 to 5	0	14.04.25	IS MCU Board Gerber

Number	Sheet	Issue	Date	Description
EL-GBR-IS-LCD	1 to 5	0	14.04.25	IS LCD Board Gerber
EL-GBR-3500IS-ANALOG	1 to 5	0	14.04.25	APT – 3500 IS Analog Board Gerber
EL-GBR-3500IS-ANALOG(A)	1 to 7	0	14.06.04	APT – 3500 IS Analog-A Board Gerber

These drawings are common to and held with IECEX BAS 17.0001X.