



Member of the FM Global Group

FM Approvals
1151 Boston Providence Turnpike
P.O. Box 9102 Norwood, MA 02062 USA
T: 781 762 4300 F: 781-762-9375 www.fmapprovals.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

S50-ab5V-cdefE. Smart Scan 50 Control Unit (Single Sensor).

NI / I / 2 / ABCD / T4 Ta = 60°C, IP67, IP65; Type 4X, Type 6;
II, III / 2 / FG / T4 Ta = 60°C; IP67, IP65; Type 4X, Type 6
a = Main Application: S (solid), L (liquid), O (open channel), or D (diameter).
b = Communication/Interface: 1(RS232),2 (RS485), 3 (Modbus),4 (FF),5 (PB), or 6(Hart).
c = Housing Type: 6 (IP65) or 7 (IP67).
d = Mechanical Interface: N(conduit NPT) or B (conduit M20).
e = Mounts: 8 (wall mount) or 9 (panel mount).
f = Power Supply: Z (DC) or A (AC).

S50-abcd-efg-hiE. Smart Scan 50 Control Unit (2 Sensors.)

NI / I / 2 / ABCD / T4 Ta = 60°C, IP67, IP65; Type 4X, Type 6;
II, III / 2 / FG / T4 Ta = 60°C; IP67, IP65; Type 4X, Type 6
a = Main Application: S (solid), L (liquid), O (open channel), or D (diameter).
b = Analog interface 1 (1x4-20), 2 (2x 4-20), or 3 (3x4-20).
c = Communication/Interface: 1 (RS232), 2 (RS485), 3 (Modbus),4 (FF), 5 (PB), or 6 (Hart).
d = Relay numbers: 0 (NA), 1 (1 relay), 2 (2 relays), 3 (3 relays), 4 (4 relays), 5 (5 relays), or 6 (6 relays).
e = Version: M (multi sensor), F (level differences) , or R (level differences with 3 4-20).
f = Housing Type: 6 (IP65) or 7 (IP67).
g = Mechanical Interface: N(conduit NPT) or B (conduit M20).
h = Mounts: 8 (wall mount) or 9 (panel mount).
i = Power Supply: Z (DC) or A (AC).

S50-abcd-efg-hiE. Smart Scan 50 Control Unit (3 Sensors).

NI / I / 2 / ABCD / T4 Ta = 60°C, IP67, IP65; Type 4X, Type 6;
II, III / 2 / FG / T4 Ta = 60°C; IP67, IP65; Type 4X, Type 6
a = Main Application: S (solid), L (liquid), O (open channel), or D (diameter).
b = Analog interface 1 (1x4-20), 2 (2x 4-20), or 3 (3x4-20).
c = Communication/Interface: 1(RS232),2(RS485),3(Modbus),4(FF),5(PB), or 6(Hart).
d = Relay numbers: 0 (NA), 1 (1 relay), 2 (2 relays), 3 (3 relays), 4 (4 relays), 5 (5 relays), or 6 (6 relays).

e = Version: N (multi sensor), G (level differences), or S (Hybrid).
 f = Housing Type: 6 (IP65) or 7 (IP67).
 g = Mechanical Interface: N(conduit NPT) or B (conduit M20).
 h = Mounts: 8 (wall mount) or 9 (panel mount).
 i = Power Supply: Z (DC) or A (AC).

S25-ab5V-cdefE. Smart Scan 25 Control Unit (Single Sensors.)

NI / I / 2 / ABCD / T4 Ta = 60°C, IP67, IP65; Type 4X, Type 6;
 II, III / 2 / FG / T4 Ta = 60°C; IP67, IP65; Type 4X, Type 6
 a = Main Application: S (solid), L (liquid), O (open channel), or R (surfaces).
 b = Communication/Interface: 1(RS232),2 (RS485), 3 (Modbus),4 (FF),5 (PB), or 6(Hart).
 c = Housing Type: 6 (IP65) or 7 (IP67).
 d = Mechanical Interface: N(conduit NPT) or B (conduit M20).
 e = Mounts: 8 (wall mount) or 9 (panel mount).
 f = Power Supply: Z (DC) or A (AC).

S25-abcd-efg-hiE. Smart Scan 25 Control Unit (2 Sensors).

NI / I / 2 / ABCD / T4 Ta = 60°C, IP67, IP65; Type 4X, Type 6;
 II, III / 2 / FG / T4 Ta = 60°C; IP67, IP65; Type 4X, Type 6
 a = Main Application: S (solid), L (liquid), O (open channel), or R (surfaces).
 b = Analog interface 1 (1x4-20), 2 (2x 4-20), or 3 (3x4-20).
 c = Communication/Interface: 1 (RS232), 2 (RS485), 3 (Modbus),4 (FF), 5 (PB), or 6 (Hart).
 d = Relay numbers: 0 (NA), 1 (1 relay), 2 (2 relays), 3 (3 relays), 4 (4 relays), 5 (5 relays), or 6 (6 relays).
 e = Version: M (multi sensor), F (level differences) , or R (level differences with 3 4-20).
 f = Housing Type: 6 (IP65) or 7 (IP67).
 g = Mechanical Interface: N(conduit NPT) or B (conduit M20).
 h = Mounts: 8 (wall mount) or 9 (panel mount).
 i = Power Supply: Z (DC) or A (AC).

S25-abcd-efg-hiE. Smart Scan 25 Control Unit (3 Sensors).

NI / I / 2 / ABCD / T4 Ta = 60°C, IP67, IP65; Type 4X, Type 6;
 II, III / 2 / FG / T4 Ta = 60°C; IP67, IP65; Type 4X, Type 6
 a = Main Application: S (solid), L (liquid), O (open channel), or R (surfaces).
 b = Analog interface 1 (1x4-20), 2 (2x 4-20), or 3 (3x4-20).
 c = Communication/Interface: 1(RS232),2(RS485),3(Modbus),4(FF),5(PB), or 6(Hart).
 d = Relay numbers: 0 (NA), 1 (1 relay), 2 (2 relays), 3 (3 relays), 4 (4 relays), 5 (5 relays), or 6 (6 relays).
 e = Version: N (multi sensor), G (level differences), or S (Hybrid).
 f = Housing Type: 6 (IP65) or 7 (IP67).
 g = Mechanical Interface: N(conduit NPT) or B (conduit M20).
 h = Mounts: 8 (wall mount) or 9 (panel mount).
 i = Power Supply: Z (DC) or A (AC).

SN2-abc-d-e. 25KHz Sensors.

IS / I, II, III / 1 / ABCDEFG / T4 Ta = 80°C – DD-TEC0006FM or DD-TEC0007FM; Entity; IP65; Type 4;

DIP / II, III / 1 / EFG / T4 Ta = 80°C; IP65; Type 4;

NI / I / 2 / ABCD / T4 Ta = 80°C, IP65; Type 4;

II, III / 2 / FG / T4 Ta = 80°C; IP65; Type 4;

Entity Parameters:

Terminals 1 and 2: Vmax = 28.1 V, Imax = 62.5 mA, Pi = 0.62 W, Ci = 0 F, Li = 1.32 mH

Terminals 3 and 4: Vmax = 10 V, Imax = 300 mA, Pi = 0.5 W, Ci = 0 F, Li = 0 H

a = Ranges: S (standard), M (mid-range), or L (long-range).

b = Transducer Type: A (coated aluminum) or S (stainless steel).

c = Transducer Housing & Threads: A (PP BSP), B (PP NPT), C (Cond. PP BSP), D (Cond. PP NPT), E (Cond. PVDF BSP), F (Cond. PVDF NPT), G (Teflon BSP), H (Teflon NPT), K (PVDF NPT), P (PVDF BSP).

d = Cable Lengths: A (16.4ft), B (49.2ft), D (82ft), F (114.8ft), G (164ft), H (246ft), I (328ft),
1 (precut 164ft), 2 (precut 328ft), 3 (precut 492.1ft), 4 (precut 574ft), or 5 (precut 656.1ft).

e = Approval: E (Intrinsically safe) or N (non-incendive/DIP).

Equipment Ratings:

1. SmartScan 25 & 50 Control Units are suitable for use in a Class I, Division 2, Group A, B, C, & D and Class II & III, Division 2, Group F, & G hazardous (classified) locations utilizing a IP67, IP65; Type 4X, Type 6 enclosure with Temperature Class T4 Ta = 60°C.
2. 25 kHz Sensor is Intrinsically Safe for use in a Class I, II, & III, Division 1, Group A, B, C, D, E, F, & G hazardous (classified) locations and Dust-Ignitionproof for use in a Class II, & III, Division 1, Groups E, F, & G hazardous (classified) locations utilizing a IP65 and Type 4 enclosure with Temperature Class T4 Ta = 80°C. Also for use in a Class I, Division 2, Group A, B, C, & D and Class II & III, Division 2, Group F & G hazardous (classified) locations utilizing IP65; Type 4X, enclosure with Temperature Class T4 Ta = 80°C. Installation shall be in accordance with control drawings DD-TEC0007FM, DD-TEC0006FM, DD-TEC0007FMZ2, or DD-TEC0080.

FM Approved for:

Solid Applied Technologies Ltd.
40 Hutzot Hayotzer St, South Industrial Zone
Ashkelon, 78170
Israel

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1998
Class 3810	1989
Class 3610	2010
Class 3611	2004
NEMA 250	1991
IEC 60529	1999


Original Project ID: 3017366

Approval Granted: May 24, 2004

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3041811	June 15, 2011		

FM Approvals LLC



J. E. Marquedant
Group Manager, Electrical

15 June 2011

Date