

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.

Approved for:

Solid Applied Technologies Ltd.
Solid House, 48 Montefiore St.
Tel-Aviv 65201
Israel

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

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

Original Project ID: 3017366

FM Approval Granted: May 24, 2004

Subsequent Revision Reports / Date FM Approval Amended

Report Number	Date	Report Number	Date
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FM Global Technologies LLC



Roger L. Allard
Assistant Vice President

REISSUED July 14, 2004
Date