



# Certificate / Certificat Zertifikat / 合格証

HON 1506048 C001

exida hereby confirms that the:

## SmartLine STT750 Temperature Transmitter with HART®

**Honeywell International Inc.**

**Honeywell Field Products**

**Fort Washington, PA 19034 - USA**

Has been assessed per the relevant requirements of:

**IEC 61508 : 2010 Parts 1-7**

and meets requirements providing a level of integrity to:

**Systematic Capability: SC 3 (SIL 3 Capable)**

**Random Capability: Type B Element**

**SIL 2 @ HFT=0; SIL 3 @ HFT = 1; Route 1<sub>H</sub>**

**PFD<sub>AVG</sub> and Architecture Constraints  
must be verified for each application**

Safety Function:

The SmartLine STT750 Temperature Transmitter with 4-20 mA 2-wire interface will measure temperature within the stated safety accuracy.

Application Restrictions:

The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.

The manufacturer  
may use the mark:



Revision 1.1 April 1, 2016  
Surveillance Audit Due  
September 1, 2018



ANSI Accredited Program  
PRODUCT CERTIFICATION  
#1004



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Evaluating Assessor

*Paul Amey*  
Certifying Assessor

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SmartLine STT750  
Temperature Transmitter  
with HART 4-20 mA 2-wire  
interface

Systematic Capability :

The product has met manufacturer design process requirements of Safety Integrity Level (SIL) 3. These are intended to achieve sufficient integrity against systematic errors of design by the manufacturer.

A Safety Instrumented Function (SIF) designed with this product must not be used at a SIL level higher than stated.

Random Capability:

The SIL limit imposed by the Architectural Constraints must be met for each element.

### IEC 61508 Failure Rates in FIT\*

Device	$\lambda_{SD}$	$\lambda_{SU}$	$\lambda_{DD}$	$\lambda_{DU}$	SFF
STT750 Temperature Transmitter	0	63	497	53	91.4%

\* FIT = 1 failure / 10<sup>9</sup> hours

SIL Verification:

The Safety Integrity Level (SIL) of an entire Safety Instrumented Function (SIF) must be verified via a calculation of PFD<sub>AVG</sub> considering redundant architectures, proof test interval, proof test effectiveness, any automatic diagnostics, average repair time and the specific failure rates of all products included in the SIF. Each subsystem must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.

The following documents are a mandatory part of certification:

Assessment Report: HON 15-06-048 R002 V1 R2

Safety Manual: Doc # 34-TT-25-05, Dec 2015 and later



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Sellersville, PA 18960