

# FIRE SAFETY CERTIFICATION

## PRODUCT APPROVAL

No. **APF-2067**

**LGAI TECHNOLOGICAL CENTER S.A. (APPLUS)**, according to the requirements of the SPC-102 Ed. 6, certifies the performances stated in the technical annex following the reference standard for:

<b>Product range</b>	<b>ECP1000 – GAS FIRE EXTINGUISHING CONTROL PANEL</b>
<b>Company</b>	<b>SHENZHEN HTI SANJIANG ELECTRONICS CO., LTD.</b> 3/F., GUANGCAI XINTIANDI MANSION, NANSHAN ROAD, NANSHAN DISTRICT, SHENZHEN, GUANGDONG, 518054 CHINA
<b>Manufactured</b>	BUILDING 1B, HONGAO INDUSTRIAL ESTATE (HONGFA HIGH-TECH INDUSTRIAL PARK), CROSSING OF GENYU ROAD AND NANMING ROAD, GONGMING STREET, GUANGMING NEW DISTRICT, SHENZHEN, GUANGDONG, CHINA
<b>Standard Reference</b>	EN 54-2:1997, EN 54-2:1997/AC:1999, EN 54-2:1997/A1:2006: "Fire detection and fire alarm systems. Part 2: control and indicating equipment". EN 54-4: 1997, EN 54-4: 1997/AC:1999, EN 54-4: 1997/A1:2002, EN 54-4:1997/A2:2006: "Fire detection and fire alarm systems. Part 4: power supply equipment". EN 12094-1:2003: "Fixed firefighting systems - components for gas extinguishing systems. Requirements and test methods for electrical automatic control and delay devices".
<b>Product Details and Test Report</b>	Please check at the technical annex



**Valid until 31<sup>st</sup> March 2024**

Bellaterra, 8<sup>th</sup> September 2023

 LGAI Technological Center, S.A. <b>Xavier Ruiz Peña</b> Product Conformity B. U., Managing Director	
You can check the validity of this certificate on our website: <a href="http://www.appluslaboratories.com/certified_products">www.appluslaboratories.com/certified_products</a>	

This document is not valid without its technical annex, whose number coincides with the number of certificate.

## APF-2067

Annexes according to **EN 54-2:1997, EN 54-2:1997/AC:1999, EN 54-2:1997/A1:2006**

### FIRE DETECTION AND FIRE ALARM SYSTEMS. PART 2: CONTROL AND INDICATING EQUIPMENT

ESSENTIAL CHARACTERISTICS	CLAUSES IN THIS EUROPEAN STANDARD	MANDATED LEVEL(S) OR CLASS(ES)
General requirements	4.	PASS
General requirements for indications	5.	PASS
The quiescent condition	6.	PASS
The fire alarm condition	7.	PASS
Output to fire alarm devices (option with requirements)	7.8	PASS
Delays to outputs (option with requirements)	7.11	PASS
Fault warning condition (see also annex F)	8.	PASS
Output to fault warning routing equipment (option with requirements)	8.9	PASS
Disabled condition	9.	PASS
Design requirements	12.	PASS
Additional design requirements for software controlled control and indicating equipment	13.	PASS
Marking	14.	PASS
Cold (operational)	15.4	PASS
Damp heat, steady state (operational)	15.5	PASS
Impact (operational)	15.6	PASS
Vibration, sinusoidal (operational)	15.7	PASS
Electromagnetic Compatibility (EMC)	15.8	PASS
Supply voltage variation (operational)	15.13	PASS
Damp heat, steady state (endurance)	15.14	PASS
Vibration, sinusoidal (endurance)	15.15	PASS

PASS; NPD = No Performance Determined, NA = Not Apply

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Annexes according to **EN 54-4:1997, EN 54-4:1997/AC:1999, EN 54-4:1997/A1:2002, EN 54-4:1997/A2:2006**

### FIRE DETECTION AND FIRE ALARM SYSTEMS. PART 4: POWER SUPPLY EQUIPMENT

ESSENTIAL CHARACTERISTICS	CLAUSES IN THIS EUROPEAN STANDARD	MANDATED LEVEL(S) OR CLASS(ES)
General requirements	4.	PASS
Functions	5.	PASS
Materials, design and manufacture	6.	PASS
Documentation	7.	PASS
Marking	8.	PASS
Cold (operational)	9.5	PASS
Damp Heat, steady state (operational)	9.6	PASS
Impact (operational)	9.7	PASS
Vibration, sinusoidal (operational)	9.8	PASS
Electrostatic discharges (operational)	9.9	PASS
Damp heat, steady state (endurance)	9.14	PASS
Vibration, sinusoidal (endurance)	9.15	PASS

PASS; NPD = No Performance Determined, NA = Not Apply

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Annexes according to **EN 12094-1:2003**

### **FIXED FIREFIGHTING SYSTEMS - COMPONENTS FOR GAS EXTINGUISHING SYSTEMS - PART 1:** REQUIREMENTS AND TEST METHODS FOR ELECTRICAL AUTOMATIC CONTROL AND DELAY DEVICES

ESSENTIAL CHARACTERISTICS	CLAUSES IN THIS EUROPEAN STANDARD	MANDATED LEVEL(S) OR CLASS(ES)
Functional requirements	4.	PASS CLASS A
Design requirements	5.	PASS
Additional design requirements for software controlled for electrical automatic control and delay devices	6.	PASS
Marking	7.	PASS
Documentation	8.	PASS
Performance test	9.1	PASS
Functional tests	9.2.	PASS
Ambiental tests	9.3.	PASS
Damp heat, Cyclic (operational)	9.4.	CLASS A - NA
SO2 corrosion (endurance)	9.5.	CLASS A - NA

PASS; NPD = No Performance Determined, NA = Not Apply

Options with requirements included in EN12094-1: 4.17, 4.18, 4.19, 4.20, 4.21, 4.23, 4.24, 4.30

The ECP1000 – Gas Fire Extinguishing Control Panel can be used in conjunction with the following ancillaries: RSU100 remote status unit, C9065T extinguishant Hold Off and the QM-ZSD-01E gas release indicator.

The use of ancillaries does not imply the compliance with the fire detection and alarm systems requirements of EN 54-13