

FIRE SAFETY CERTIFICATION

PRODUCT APPROVAL

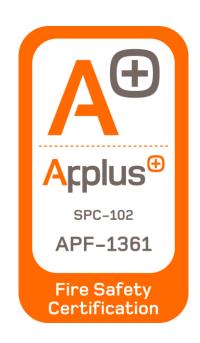


No

APF-1361

LGAI TECHNOLOGICAL CENTER S.A. (APPLUS), under the requirements of its SPC-102 certifies:

Product range	COMPACT SYSTEM
Company	OPTIMUS, S.A. C/ BARCELONA,101 17003 GIRONA (ESPAÑA)
Manufactured	OPTIMUS, S.A. C/ BARCELONA,101 17003 GIRONA (ESPAÑA)
Standard Reference	EN 54-16:2008: "Fire detection and fire alarm systems. Part 16: Voice alarm control and indicating equipment".
Product Details and Test Report	Please check at the technical annex



Renovation of the initial certificate issued on 16th February 2018

Valid until February 2021

Bellaterra, 13th March 2020



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

LGAI Technological Center, S.A. (APPLUS) Campus UAB s/n – Ronda de la Font del Carme, s/n E - 08193 Bellaterra (Barcelona) T +34 93 567 20 00 www.appluslaboratories.com



Technical Annex Ed. 1 13/03/2020

TECHNICAL ANNEX

APF-1361

Annexes according to EN 54-16:2008

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
Reception and processing of fire signals	7.1	PASS
Indication of the voice alarm condition	7.2	PASS
Audible warning (option with requirements)	7.3	NA
Delays to entering the voice alarm condition (option with requirements)	7.4	NA
Phased evacuation (option with requirements)	7.5	PASS
Silencing of the voice alarm condition	7.6	PASS
Reset of the voice alarm condition	7.7	PASS
Output to fire alarm devices (option with requirements)	7.8	NA
Voice alarm condition output (option with requirements)	7.9	PASS
Fault Warning Conditions	8	PASS
Disabled Condition	9	NA
Voice Alarm Manual Control	10	PASS
Interface to External Control Device(s)	11	PASS
Emergency Microphone(s)	12	PASS
Design Requirements	13	PASS
Additional Design Requirements for Software Controlled VACIE	14	PASS
Marking	15	PASS
Output Power	16.4	PASS
Signal-to-noise Ratio	16.5	PASS
Frequency Response of VACIE Without Microphone(s)	16.6	PASS

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

LGAI Technological Center, S.A. (APPLUS) Campus UAB s/n – Ronda de la Font del Carme, s/n E - 08193 Bellaterra (Barcelona) T +34 93 567 20 00 www.appluslaboratories.com



Technical Annex Ed. 1 13/03/2020

TECHNICAL ANNEX

APF-1691

Essential characteristics	Clauses in this European Standard	Mandated level(s) or class(es)
Frequency Response of VACIE With Microphone(s)	16.7	PASS
Cold (Operational)	16.8	PASS
Damp, Heat, Steady State (Operational)	16.9	PASS
Damp, Heat, Steady State (Endurance)	16.10	PASS
Impact (Operational)	16.11	PASS
Vibration, Sinusoidal (Operational)	16.12	PASS
Vibration, Sinusoidal (Endurance)	16.13	PASS
Supply Voltage Variation (Operational)	16.14	PASS
Electromagnetic Compatibility (EMC), Immunity tests (Operational)	16.15	PASS

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

LGAI Technological Center, S.A. (APPLUS) Campus UAB s/n – Ronda de la Font del Carme, s/n E - 08193 Bellaterra (Barcelona) T +34 93 567 20 00 www.appluslaboratories.com



Technical Annex Ed. 1 13/03/2020

TECHNICAL ANNEX

APF-1691

THE CERTIFIED SYSTEM INCLUDES THE FOLLOWING MODULES AND OPTIONS
COMPACT: modular IP audio matrix for Public Address & Voice Alarm System.
COMPACT-E: System expansion unit.
UMX-C16: Contacts card with 16 inputs and 4 outputs.
UMX-EA3: 2 audio input card for priority and/or music with VOX control.
UMX-2M3: 2 audio input card for BGM.
UMX-2SA: 2 audio output card with amplifiers & speaker lines surveillance.
UMX-MC6: Zones subdivision card (6) with backup functionalities.
UMX-2SB1/2/3/4: Zones subdivision card (from 4 to 16) with individual music volume and surveillance/backup functionalities.
DC700ETH: PA/VA remote console device & fireman's microphone.
DA500D2: 2x500W power amplifier.
DA500D4: 4x500W power amplifier.
MS150: Unit of Power Supply SLAT certified EN54-4.
ME200B: Built-in fireman's panel & microphone for COMPACT equipment.
LC-XB12100P: PANASONIC batteries 12V 100Ah.
Z-53CPR: enclosure for DC-700ETH equipment.
Z-53DFC: circuit breaker for MS-150 batteries.
Z-53DFA: circuit breaker for MS-150 main power supply.
Z-53TC: individual power supply plug for MS-150.
Z-50CF1: module for speaker line and ethernet connection.
Z-50CF2: 230VAC input filter.
C678CE2A: speaker line protection circuit for Z-50CF1.
C678CE3A: ethernet protection circuit for Z-50CF1.
IE-SW-BL08-8TX: WEIDMUELLER 8 port network switch.
AR-18KEN54: 18 units rack cabinet with accessories for EN54-16 compliance.
AR-27KEN54: 27 units rack cabinet with accessories for EN54-16 compliance.

AR-37KEN54: 37 units rack cabinet with accessories for EN54-16 compliance. AR-42KEN54: 42 units rack cabinet with accessories for EN54-16 compliance.