



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAA00002TZ**  
Revision No:  
**2**

## This is to certify:

**That the Peripheral Equipment**

with type designation(s)

**RXi Panel PC, RXi Web HMI Panel, RXi Industrial Monitor, Quickpanel XP, Quickpanel XP View & Control, Quickpanel +, and RXi2 - LP Industrial PC**

Issued to

**Intelligent Platforms, LLC**  
**Charlottesville, VA, USA**

is found to comply with

**DNV rules for classification – Ships, offshore units, and high speed and light craft**

## Application :

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.**

<b>Temperature</b>	<b>D</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>A</b>
<b>EMC</b>	<b>B</b>
<b>Enclosure</b>	<b>A</b>

Issued at **Hamburg** on **2023-01-23**

for **DNV**

This Certificate is valid until **2025-07-01**.

DNV local unit: **Houston, Approval CMC**

Approval Engineer: **Jens Dietrich**

.....  
**Joannis Papanuskas**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.  
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2022-12

www.dnv.com

Page 1 of 6

## Place of manufacture

APLEX Technology Inc.  
 15F, No.150, Jian Yi Road, Zhonghe Dist.,  
 New Taipei City, 235 TAIWAN

## Product description

### **IC755CSxyzCDA, IC755CxyzCDB**

QuickPanel™ View & Control, Color TFT with Multi-touch Projected Capacitive Screen,  
 Operating System: Windows 10 IOT Enterprise LTSC,  
 Chipset AMD Embedded G-Series SOC, CPU AMD GX-210HL or GX-412GC, 1.0/1.2GHz, 8GB DDR3L RAM  
 2/4x Ethernet Ports (10/100/1000Mbit), 1x RS232, 1xRS485, 2xUSB3.0 or 2xUSB3.0/2xUSB2.0;  
 Power supply: 24VDC, isolated. Ingress protection: IP66 (front), IP20 (rear).

**x:** Type of Screen:

- S: Standard Emerson Bezel
- O: Outdoor SLR Emerson Bezel

**y:** Screen Configuration:

- S: Standard aspect ratio
- W: Widescreen

**zz:** Screen Size:

- 07: 7" Diagonal Display, 1024x600 WSVGA
- 10: 10" Diagonal Display, 1280x800 WXGA
- 12: 12" Diagonal Display, 1280x800 WXGA
- 15: 15" Diagonal Display, 1920x1080 Full HD
- 19: 19" Diagonal Display, 1920x1080 Full HD
- 24: 24" Diagonal Display, 1920x1080 Full HD

### **IC756CxyzIM, Backing Modules: IC756CONVS, IC756CONVL**

RXi-Industrial Monitor, HDMI In, Display Port In/Out, USB In (for touch)  
 Power supply: 24VDC, isolated. Monitor ingress protection: IP66 (front), IP20 (rear).

**x:** Type of Screen:

- S: Standard Emerson Bezel
- O: Outdoor SLR Emerson Bezel

**y:** Screen Configuration:

- S: Standard aspect ratio
- W: Widescreen

**zz:** Screen Size:

- 07: 7" Diagonal Display, 1024x600 WSVGA
- 10: 10" Diagonal Display, 1280x800 WXGA
- 12: 12" Diagonal Display, 1280x800 WXGA
- 15: 15" Diagonal Display, 1920x1080 Full HD
- 19: 19" Diagonal Display, 1920x1080 Full HD
- 24: 24" Diagonal Display, 1920x1080 Full HD

Backing modules

**IC756CONVS** RXi - Industrial Monitor Audio/Video box for 7" and 10",

**IC756CONVL** RXi - Industrial Monitor Audio/Video box for 12" through 24".

### **IC757CxyzWHMI**

RXi-Web HMI Panel Color TFT with Multi-touch Projected Capacitive Screen,  
 Operating System: Linux kernel 4.1.15,  
 CPU Freescale i.MX6DualLite, 1.0GHz, 2GB DDR3L RAM  
 1x Ethernet Port (10/100/1000Mbit), 1x RS232/RS422/RS485 COM Port, 1xUSB2.0, 1xmicroUSB  
 Power supply: 24VDC, Ingress protection: IP66 (front), IP20 (rear).

**x:** Type of Screen:



Job Id: 262.1-033624-3  
Certificate No: TAA00002TZ  
Revision No: 2

S: Standard Emerson Bezel  
O: Outdoor SLR Emerson Bezel

y: Screen Configuration:  
S: Standard aspect ratio  
W: Widescreen

zz: Screen Size:  
07: 7" Diagonal Display, 1024x600 WSVGA  
10: 10" Diagonal Display, 1280x800 WXGA  
12: 12" Diagonal Display, 1280x800 WXGA  
15: 15" Diagonal Display, 1920x1080 Full HD

Backing modules

**IC757WEBHMIS** RXi - Industrial Monitor Audio/Video box for 7" and 10",  
**IC756WEBHMIL** RXi - Industrial Monitor Audio/Video box for 12" through 24".

**IC758Cabcddeeefffg**

RXi-Panel PC with Color TFT with Multi-touch Projected Capacitive Screen,  
2/4x Ethernet Ports (10/100/1000Mbit), 1x RS232, 1xRS485, 2xUSB3.0 or 2xUSB3.0/2xUSB2.0;  
Power supply: 24VDC, isolated. Ingress protection: IP66 (front), IP20 (rear);

a: Type of Screen:  
S: Standard Emerson Bezel  
O: Outdoor SLR Emerson Bezel

b: Screen Configuration:  
S: Standard aspect ratio  
W: Widescreen

c: RAM size:  
A: 4GB  
B: 8GB  
C: 16GB

dd: Screen Size:  
07: 7" Diagonal Display, 1024x600 WSVGA  
10: 10" Diagonal Display, 1280x800 WXGA  
12: 12" Diagonal Display, 1280x800 WXGA  
15: 15" Diagonal Display, 1920x1080 Full HD  
19: 19" Diagonal Display, 1920x1080 Full HD  
24: 24" Diagonal Display, 1920x1080 Full HD

eee: Processor:  
PC : AMD Embedded G-Series SOC, GX-210HL, 1.0GHz  
PCX:AMD Embedded V1000-Series SOC, V1404I, 2.0GHz

fff: SSD size:  
32 : 32GB SSD (Standard)  
64 : 64GB SSD  
128 : 128GB SSD  
256 : 256GB SSD  
512 : 512GB SSD

g: Software Load:  
Blank: Standard software load  
A-Z: Any alphanumeric number depicting customer requested software

Computing Modules, Windows 10 IOT Enterprise LTSP:

<b>IC758COMASPC</b>	RXi - Panel PC Computing Module for 7" & 10" - 4GB RAM, 32GB SSD
<b>IC758COMASPC64</b>	RXi - Panel PC Computing Module for 7" & 10" - 4GB RAM, 64GB SSD
<b>IC758COMASPC128</b>	RXi - Panel PC Computing Module for 7" & 10" - 4GB RAM, 128GB SSD
<b>IC758COMBSPC128</b>	RXi - Panel PC Computing Module for 7" & 10" - 8GB RAM, 128GB SSD



Job Id: **262.1-033624-3**  
Certificate No: **TAA00002TZ**  
Revision No: **2**

**IC758COMALPC128**      RXi - Panel PC Computing Module for 12" through 24" - 4GB RAM, 128GB SSD  
**IC758COMBLPC**        RXi - Panel PC Computing Module for 12" through 24" - 8GB RAM, 32GB SSD

Screens:

**IC758CxWzzSCREEN, C758CxWzzSCREENSLR**

**X:** Type of screen:

- O: Outdoor SLR, Emerson Bezel
- S: Standard, Emerson Bezel

**zz:** Screen size:

- 07: 7" Diagonal Display, 1024x600 WSVGA
- 10: 10" Diagonal Display, 1280x800 WXGA
- 12: 12" Diagonal Display, 1280x800 WXGA
- 15: 15" Diagonal Display, 1920x1080 Full HD
- 19: 19" Diagonal Display, 1920x1080 Full HD
- 24: 24" Diagonal Display, 1920x1080 Full HD

**IC760CxyzzCDA, IC761CxyzzCDACON**

QuickPanel-XP with Color TFT with Multi-touch Projected Capacitive Screen,  
Operating System: Windows 10 IOT Enterprise LTSC, Chipset AMD Embedded G-Series SOC, CPU AMD GX-210HL or  
GX-412GC, 1.0/1.2GHz, 8GB DDR3L RAM;  
2/4x Ethernet Ports (10/100/1000Mbit), 1x RS232, 1xRS485, 2xUSB3.0 or 2xUSB3.0/2xUSB2.0;  
Power supply: 24VDC, isolated. Ingress protection: IP66 (front), IP20 (rear).

**x:** Type of Screen:

- S: Standard Emerson Bezel
- O: Outdoor SLR Emerson Bezel

**y:** Screen Configuration:

- S: Standard aspect ratio
- W: Widescreen

**zz:** Screen Size:

- 07: 7" Diagonal Display, 1024x600 WSVGA
- 10: 10" Diagonal Display, 1280x800 WXGA
- 12: 12" Diagonal Display, 1280x800 WXGA
- 15: 15" Diagonal Display, 1920x1080 Full HD
- 19: 19" Diagonal Display, 1920x1080 Full HD
- 24: 24" Diagonal Display, 1920x1080 Full HD

Industrial PCs:

**R2LONabcde**

RXi2 Low Profile Industrial PC Series

**a:** RAM size:

- 1: 4GB
- 2: 8GB

**b:** Processor:

- A: Dual Core 1.0GHz
- B: Quad Core 1.2GHz

**c:** Software Load:

- 0: No OS
- 1: Windows 10
- 2: Linux w/PAC Edge
- 3-9: Custom OS

**d:** SSD size:

- A: 32GB
- B: 64GB

C: 128GB

e: Mounting:  
 Blank: Wall Mount

**R2LACCSMNT** RXi2 – LP IPC Flat Mounting Bracket Small  
**R2LACCLMNT** RXi2 – LP IPC Flat Mounting Bracket Large

Compass safe distances:

IC757C: 50cm (Standard Compass), 30cm (Steering Compass)

IC758C: 50cm (Standard Compass), 25cm (Steering Compass)

IC756C: 55cm (Standard Compass), 30cm (Steering Compass).

## Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

## Application/Limitation

Limitations are stated in Marine Notice, dated 2020-06-16:

Internal buzzers of the equipment listed under Product description do not meet the requirements of CG-0339, Sec.3, 15.2 with regard to required alarm sound levels for bridge application. Additional alarm arrangement to be provided for these applications.

VESA mounting not be used for Marine application.

IC757C (RXi Web Panels) do not offer isolation between Frame Ground (FG/PE) and Signal Ground (GND/0V). 24 VDC power needs to be supplied via a Safety Extra Low Voltage (SELV) and Limited Energy Circuit or SELV and Class II (double insulated) DC power supply. Ref. section "4.3 Initial Startup" of manual GFK-2847R.

## Type Approval documentation

Vibration Source Technology, Report No. VS-VT-090619-02, dated 2020-06-19;  
 Vibration Source Technology, Report No. VS-TV-081230-01, dated 2019-12-30;  
 Vibration Source Technology, Report No. VS-TV-090619-01, dated 2020-06-19;  
 Vibration Source Technology, Report No. VS-TV-090619-02, dated 2020-06-19;  
 Vibration Source Technology, Report No. VS-TV-081224-02, dated 2019-12-24;  
 Vibration Source Technology, Report No. VS-TV-090113-01, dated 2020-01-13;  
 DEKRA Report No. 2040831R-E3012300003, dated 2020-05-05;  
 MRT Technology Report No. 2006TWB802-E1, vers. 1.0, dated 2020-06-03;  
 CAL TECH, 190412001C-2, dated 2019-08-28 (IP-Test);  
 CAL TECH, Report No.: 190412001C-1, dated 2020-03-02;  
 CAL TECH, Report No.: 190412001C-1, dated 2020-06-10;  
 CAL-TECH, Report No.: 200619001C-1, dated 2020-08-12.  
 Data sheets: Industrial PCs, GFA2163A, May 2019; QuickPanel-XP™, 00813-0100-0111, January 2020;  
 QuickPanel+™, 00813-0100-0111, January 2020; Industrial Displays, GFA2163B, May 2019; Industrial Displays,  
 GFA2161B, May 2019; Industrial Displays GFA2162B, April 2019; RXi Panel PC, 00813-0100-0116, October 2020.  
 TA Assessment Report issued by DNV Kaohsiung, dated 2022-12-16, with amendments.

## Tests carried out

Applicable tests according to DNV GL CG-0339, August 2021.

## Marking of product

Maker, type designation, serial number.

## Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available



Job Id: **262.1-033624-3**  
Certificate No: **TAA00002TZ**  
Revision No: **2**

- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE