DNV·GL

Certificate No:
TAA00002TZ

TYPE APPROVAL CERTIFICATE

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 GL 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 GL.

Temperature	**D**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**A**

Issued at **Hamburg** on **2020-07-02**
This Certificate is valid until **2025-07-01**.
DNV GL local station: **Houston, Approval CMC**

for **DNV GL**

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.

Place of manufacture

APLEX Technology Inc.
2F, No.249, Jian Yi Rd. Zhonghe Dist.
New Taipei City, 235
TAIWAN/SGS

Product description

IC755CSxyzzCDA, IC755CxyzzCDB
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

IC756CxyzzIM, 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).

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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".

Screens

IC758CSWzzSCREEN, IC758CSWzzSCREENSLR

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

IC757CxyzzWHMI
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:
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".

Screens
IC758CxWzzSCREEN, IC758CxWzzSCREENSLR

x=O Outdoor SLR, Emerson Bezel, x=S Indoor, 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.

IC758CabcddPCee
RXi-Panel PC 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, 4GB or 8GB DDR3L RAM, SSD 32…512GB;
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 DDR3L
B: 8GB DDR3L

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

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

Computing Modules, Windows 10 IOT Enterprise LTSB:

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

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
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19: 19" Diagonal Display, 1920x1080 Full HD
24: 24" Diagonal Display, 1920x1080 Full HD

Industrial PCs:

R2L0N1A1A	RXi2 – LP IP C, Dual Core GX-2 10HL 1GHz, 4GB RAM, 32GB S SD, 2xRJ45, Windows 10 IOT Enterprise LT S C
R2L0N1A0A	RXi2 – LP IP C, Dual Core GX -2 10HL 1GHz, 4GB RAM, 32GB S SD, 2xRJ45, No OS
R2L0N1A1B	RXi2 – LP IP C, Dual Core GX-2 10HL 1GHz, 4GB RAM, 64GB S SD, 2xRJ45, Windows 10 IOT Enterprise LT S C
R2L0N1A0B	RXi2 – LP IP C, Dual Core GX -2 10HL 1GHz, 4GB RAM, 64GB S SD, 2xRJ45, No OS
R2L0N1A1C	RXi2 – LP IP C, Dual Core GX-2 10HL 1GHz, 4GB RAM, 128GB SSD, 2xRJ45, Windows 10 IOT Enterprise LTS C
R2L0N1A0C	RXi2 – LP IP C, Dual Core GX -2 10HL 1GHz, 4GB RAM, 128GB SSD, 2xRJ45, No OS
R2L0N2A1C	RXi2 – LP IP C, Dual Core GX-2 10HL 1GHz, 8GB RAM, 128GB SSD, 2xRJ45, Windows 10 IOT Enterprise LTS C
R2L0N2A0C	RXi2 – LP IP C, Dual Core GX -2 10HL 1GHz, 8GB RAM, 128GB SSD, 2xRJ45, No OS
R2L0N1B1A	RXi2 – LP IP C, Quad Core GX-412GC 1.2GHz, 4 GB RAM, 32GB SSD, 4 xRJ45, Windows 10 IO T Enterprise LTS C
R2L0N1B0A	RXi2 – LP IP C, Quad C ore GX -412GC 1.2GHz, 4 GB RAM, 32GB SSD, 4xRJ45, No OS
R2L0N1B1B	RXi2 – LP IP C, Quad Core GX-412GC 1.2GHz, 4 GB RAM, 64GB SSD, 4 xRJ45, Windows 10 IO T Enterprise LTS C
R2L0N1B0B	RXi2 – LP IP C, Quad Core GX-412GC 1.2GHz, 4 GB RAM, 64GB SSD, 4 xRJ45, No OS
R2L0N1B1C	RXi2 – LP IP C, Quad Core GX -412GC 1.2GHz, 4 GB RAM, 128GB SSD, 4xRJ45, Windows 10 IO T Enterprise LTS C
R2L0N1B0C	RXi2 – LP IP C, Quad Core GX -412GC 1.2GHz, 4 GB RAM, 128GB SSD, 4xRJ45, No OS
R2L0N2B1C	RXi2 – LP IP C, Quad Core GX-412GC 1.2GHz, 8 GB RAM, 128GB SSD, 4xRJ45, Windows 10 IO T Enterprise LTS C
R2L0N2B0C	RXi2 – LP IP C, Quad Core GX -412GC 1.2GHz, 8 GB RAM, 128GB SSD, 4xRJ45, No OS
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 Compas)
IC758C: 50cm (Standard Compass), 25cm (Steering Compas)
IC756C: 55cm (Standard Compass), 30cm (Steering Compas).

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

Limitation 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.

Tests carried out

Applicable tests according to DNV GL CG-0339, December 2019.

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
- 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