ARTC

NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

Certificate No.	NESA-S102	Version No. 1.0
Approval date	26 September 2023	
Approved by	Head of Engineering Standards	
This certificate is issued to		
Supplier	Maximation Pty Ltd 1 Kalori Avenue, Wyoming NSW 2250	
In respect of		
Manufacturer	Ovarro Pty Ltd	
Product Description	Kingfisher Telemetry Equipment	
Item identification	See the approved item list	
Application	ARTC Network-wide	
Relevant Standards	SPS 02 Environmental Conditions	
	SPS 05 Electrical & Electronic Components (Ratings & Construction Requirements)	
Conditions of Approval	• For use in accordance with standard typical circuits only. • Only components listed may be utilised. • Each RTU which controls route setting or point control functions shall include at least two same processor (CP-12) and two same power supply (PS-12) modules in hot standby configurations. • Logic written for the CP-11 or CP-21 shall be recompiled and then downloaded into the CP-12 without changing logic. Configuration needs to be modified to ensure that the processor type is a CP-12 before logic compilation. • Manufacturer/Supplier shall be notified to ARTC 6 months in advance in case of part number update, or obsolescence with suitable direct replacement product.	

A general condition of approval is that the manufacturer remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011.

Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid certificate.

Australian Rail Track Corporation

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Note/Comments

Issue date	26/09/2023	**Expiry date**	N/A
Issued by		**Manager Signalling Standards ARTC**	

Approved Item List:

Catalogue No.	Component	Conditions of Use
Backplanes		
BA-4 / BA-4-PLUS	4 Slot backplane	# Use with PC-1 processor only
BA-40 / BA-40-PLUS	4 Slot backplane	#
BA-6 / BA-6-PLUS	6 Slot backplane	#
BA-12 / BA-12-PLUS	12 Slot backplane	#
Power Supplies		
PS-12-0 / PS-12-C	AC Power Supply Module	@ PS-12 supersedes PS-11.
PS-22-0 / PS-22-C	DC Power Supply Module	@ PS-22 supersedes PS-21.
Processor Modules		
CP-12	Processor	CP-12 supersedes CP-11. CP-12 must use firmware v1.48d or later
MC-12	Communications Module	MC-12 supersedes MC-11. MC-12 must use firmware 113 or later
PC-1	Power & Processor Module	The PC-1 can only be installed on 4-slot backplane (BA-4 / BA-4-PLUS).
Communications Option Boards		
A4	Ethernet SFP Fibre Optic Interface	% A4 supersedes A3
D	Dial-up Modem (PSTN) V34 33.6 kbps	%$ S2-D2/T20B v1.1 approved for use in CP12/MC12
F	Fiber Optic Interface	%$
I	Isolated Serial	%$
L	Private Line or Analogue Radio Interface	%$

Catalogue No.	Component	Conditions of Use
T4	Ethernet RJ45 Copper – 10/100 Mbps	%
Digital Input Modules		
DI-5	Digital DC Input Module, 16 Channel	
DI-10	Digital AC or DC Input Module, 16 Channel	
Digital Output Modules		
DO-1	Digital Relay Output Module, NO/NC, 8 Channel	
DO-2	Digital Relay Output, NO, 16 Channel	
DO-6	Digital Relay Driver Output	DO-6 supersedes DO-5. DO-6 require the use of TEL-REL-002
TEL-REL-002	Relay Output Board for DO-6	
Genisys Protocol Drivers		
Genisys Slave Driver	CP-12 Firmware Driver	Version 7
Genisys Master Driver	CP-12 Firmware Driver	Version 2
Support Software / Tools and Manuals		
Toolbox32	Configuration software	Version 2.4
Kingfisher Plus Hardware Manual	Documentation	V7.23 or later - Device Specifications

– The part numbers with the '-PLUS' suffix use the green pluggable terminal blocks for the inter-rack data connectors, while the old (will be referred to as 'BA-x') backplanes use black crimp connectors (Harwin Datamate M80) for that purpose.

@ – The PS-x2 modules with '-C' suffix in their Order Code have an additional isolated DC-DC converter board DC-10 installed into the main PS-x2 board. It provides isolated 24 V power to the 24VAUX output. All hardware versions of PS-x2 modules are described in Kingfisher Plus+ hardware manual.

% – Option boards compatibility when using CP-12 processor modules with MC-12 communications modules.

$ – Option boards compatibility when using PC-1 processor modules with MC-12 communications modules.