NSW GOVERNMENT | Transport for NSW

Intelligent Transport Systems

Type Approval

Certificate No:	ITS-TAN000132

Issued to:

Aldridge Traffic Controllers Pty Ltd

For:

Device Type	ATC ATSC4 AMD3,4,5 LPM 5900 HRS v2.4 VC6.2 Build 3 Lib 2		
TfNSW Specification:	TSI-SP-069	Version:	1.0

Summary Scope:

ATC ATSC4 AMD3,4,5 LPM 5900 Logic Module and HRS v2.4 TRAFF-20 VC6.2 Bld 3 Lib 2 Firmware 20211118V2.4 supporting up to 32 signal group outputs, 48 vehicle detector inputs and 8 pedestrian detector inputs (noting that up to 64 external detector inputs are made available), and Amendments 3, 4 and 5 (with deviations) in accordance with TSI-SP-069 (previously TSC/4), which in turn is to be mounted in approved traffic controller housings.

Note: See overleaf for conditions of approval and deviations from specifications.

Evaluation Reference:	ITS-EV00277	Approver	Snr Manager Specifications and Evaluations
Approver Signature:	*Raj J Roychoudhry*	Date	29th May 2023

Form: TSI-FM-001 v2.0

A) Description and itemisation of the equipment covered by this type approval

Descriptors and Electronic Identifiers of Modules on the Logic Rack as provided:

- Logic Processor Module (LPM) – Logic Module   TC430-045-0D   Ser: 20210817091560   Rev: 2020-08-V2.01
  LPM Daughter Board – Firmware   TC430-053-0D   Ser: 20210820001394   Rev: 20211118V2.4
- Spare Expansion Slot   BLANK   Ser: BLANK   Rev: BLANK
- External Input Module (ESM-A) - 16 Channel   TC400-165-0A   Ser: 20191030120361   Rev: 2017-05-V1.04
- Vehicle Detector Module (VDM) - 16 Channel   TC416-080-AB   Ser: 20191112080696   Rev: 2012-11-V1.06
- Vehicle Detector Module (VDM) - 16 Channel   TC416-080-AB   Ser: 20191121080918   Rev: 2012-11-V1.06
- Vehicle Detector Module (VDM) - 16 Channel   TC416-080-AB   Ser: 20191121080920   Rev: 2012-11-V1.06
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191231086165   Rev: 2018-02-V1.09
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191231086161   Rev: 2018-02-V1.09
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191231086044   Rev: 2018-02-V1.09
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191231086043   Rev: 2018-02-V1.09
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191231086046   Rev: 2018-02-V1.09
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191231086164   Rev: 2018-02-V1.09
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191130085942   Rev: 2018-02-V1.09
- NexGen Output Module (OPM) - 4 Channel   TC400-240-0BD   Ser: 20191231086173   Rev: 2018-02-V1.09
- Power Supply Module (PSM)   TC400-025-0JA   Ser: 20191231101171   Rev: 2013-07-V2.05
  Secondary Conflict Monitor (SCM)   TC400-036-0GC   Ser: 20191231101172   Rev: 2013-07-V2.05
  Controller Configuration   TC430-CFG-0A   Ser: V622459211118E   Rev: 16FB3E20

B) Summary of deviations from specified requirements

1. Supports only 8 pedestrian detector inputs (limitation being in TRAFF); requirement is for 16.
2. XRJ (for PSTN): not provided; due to technology being phased-out.
3. Light Sensor "day" setting to 70 lux by factory; requirement is for 150 lux; adjust before field.
4. Web User Interface (Web UI): disabled thus inaccessible; due to tendency to trigger Fault mode.
5. Control Signal (Dim-By-Wire) dimming likely not interchangeable with other on par controllers.
6. Housing Electrical Code Encoder (HECE): likely not interchangeable with other on par controllers.
7. Start with Signal Group Outputs at 240 V for CMODE bits 5-7 set to non-240 settings.
8. Personality Module (XPM): not interchangeable with other on par controllers.
9. Control Signal dimming, CMODE bits 5-7 and HECE operation: varies with other on par controllers.
10. During conflict capture, the logic module may tend to go to Fault mode before FAILS exhausted.
11. If conflicts not sustained, the logic module may tend to auto-start from Fault without intervention.
12. The logic module tends to go to Fault (logging F839) without intervention; no SCATS connected only when configured for Ethernet communication.
13. If a conflict to Yellow is sustained, Master Relay may chatter indefinitely, until contact removed.
14. Due to 6, 7 and 9 above, CMODE bits 5-7 and HECE need to be restricted to "100" with bit 7 being the most significant and bit 5 the least significant for 240 V operation and "0111" for Dim-By-Wire Mains, respectively.
15. XUP: to prevent file system failures needing power cycling the controller, USB drives must (a) not have volume encryption, (b) be formatted to FAT32 only, and (c) be free of file system corruptions before insertion to XUP.

C) Relevant Specifications, Drawings and Standards

TSI-SP-069 v1.0 (and drawings and standards as referenced therein).

D) Conditions of use

Certificate users shall verify with TfNSW whether this certificate is current, valid, and applies to the latest TfNSW specification version, when using in situations where current validity is required.

E) Related Certification History

Certificate Number	Issued	EV Number	Description or change details
N/A	N/A	N/A	First certificate for this Logic Module and HRS.

     Form: TSI-FM-001 v2.0