SIU-2218

ATCC SERIAL INTERFACE UNIT

The SIU-2218 Serial Interface Unit (SIU) performs the interface between Serial Bus #1 of the Advanced Traffic Controller (ATC) and the Input Assembly, Output Assembly, and other devices in an ATC modular cabinet assembly. Its functions include controlling load switch outputs, detector resets, communicating with inductive loop detectors and other devices, and the conditioning and conversion of loop detector inputs for the ATC.

The SIU-2218 meets all requirements of the *ASHTO/ITE/NEMA Advanced Transportation Controller (ATC) Cabinet Standard, ATC 5301 V02.02.*

SIU-2218 ENHANCED FEATURES

SIU Programming: Input or Output Assembly mounted address jumpers program the SIU-2218 configuration. No other user setup is required.

Input / Output Pins:
- 54 Programmable Input/Output pins
- 4 Optically Isolated Input pins
- 1 Line Sync Reference Input pin
- 4 Address Select Input pins

Standardized Communications: The SIU-2218 uses real-time standardized 614.4 Kbs SDLC communications with the ATC to transfer command and response data on Serial Bus #1.

SIU Port 4 INBUS: The Serial Bus #2 from the ATC is directed to peripheral devices in the Input Assembly using the SIU-2218 on-board INBUS buffers.

Output Drivers: All outputs are rated at 150mA continuous sink current. Each output provides a 500mA typical current limit. Outputs are rated to 50 volts and utilize a voltage clamp for inductive transient protection.

Isolated Inputs: Four optically isolated inputs provide isolation for Pedestrian Detector and Remote Interconnect inputs. These inputs are intended for direct connection to 12 Vac for Pedestrian Detector applications. They may also be connected for 'Low True' DC applications when the Opto Input Ground pin is connected to a 24Vdc supply.

Internal Diagnostics: A complete set of internal diagnostic self-tests are run continuously to help ensure critical components of the SIU-2218 are operating correctly.

Address Reporting: A front panel LED indicator can be used to report the current Input/Output assembly address assignment of the SIU-2218 for cabinet configuration verification.

Front Panel Port: A Diagnostic EIA-232 port is available on the front panel to interface to SIU-2218 functions using the EDI *FrontPanel* software, and for custom applications. The connector is 9 pin "DE9S" subminiature type connector.

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