

SIU-2218 Serial Interface Unit

ATC Traffic Equipment and Software

The SIU-2218 Serial Interface Unit provides the critical connection between the ATC controller and the Input Assembly, Output Assembly, and other devices within an ATC traffic cabinet. With 54 programmable input/output lines and four optically isolated inputs, the SIU-2218 provides a flexible interface for managing cabinet I/O while supporting standardized communications with the controller.

Designed for standards-based ATC cabinet applications, the SIU-2218 uses real-time 614.4 Kbps SDLC communications to transfer command and response data over Serial Bus #1. Configuration is streamlined through Input or Output Assembly-mounted address jumpers, eliminating the need for additional user setup. Its Port 4 INBUS capability also provides the communication path between Serial Bus #2 and peripheral devices in the Input Assembly.

Built-in diagnostics help maintenance personnel quickly verify operation and cabinet configuration. Continuous internal self-tests, front-panel status indicators, address reporting, and an EIA-232 diagnostic port provide convenient tools for troubleshooting and system maintenance.



Features & Benefits

At only 1.42 inches wide, the SIU-2218 provides full SIU functionality in a compact package. Its narrow profile helps make efficient use of valuable equipment space within the ATC cabinet.

Four dedicated optically isolated inputs provide electrical isolation for applications such as pedestrian detector and remote interconnect inputs. This provides a versatile interface for incorporating these external signals into the cabinet environment.

The SIU-2218 can be plugged in or removed while power is applied without risk of damage, helping simplify installation and field servicing. Front-panel address reporting also allows technicians to quickly verify the unit's assembly address during cabinet configuration and troubleshooting.

SIU-2218 Specifications



- **Dimensions:** 4.50 in. (H) x 1.42 in. (W) x 6.87 in. (Depth – front panel to rear edge of DIN connector)
- **Weight:** 5.6 Ounces (158 g)
- **Operating Voltage Range:** 16 to 30 VDC
- **Operating Environmental Range:** -40°F to +176°F (-40 °C to +80°C) and relative humidity from 0 to 95%
- **54 Programmable I/O Lines** — Provides flexible input/output configuration, supplemented by four dedicated optically isolated inputs.
- **High-Speed SDLC Communications** — Supports real-time standardized 614.4 Kbps communications with the ATC over Serial Bus #1.
- **Protected Output Drivers** — Outputs are rated for 150 mA continuous sink current with 500 mA typical current limiting and voltage-clamp protection against inductive transients.
- **Continuous Internal Diagnostics** — Built-in self-tests continuously monitor critical SIU-2218 components to help verify proper operation.

Oriux Traffic Control – With its array of advanced traffic control (ATC) equipment and software, Oriux is an industry leader in intersection control products, with over 40 years of experience and product innovation in the field.

The Oriux line-up includes the ATC-1000, ATC-1500, ATC-2000, C5000, SG-1000 MMU2, GREENWave software and Oriux's revolutionary web-based traffic management system, Spinnaker ATMS.

For traffic control products, Oriux has all you need.

