

iCITE[®]

Intelligence Cabinet Interface to Traffic Equipment

DA - 300[®] Data Aggregator

Real-Time Traffic & Arterial Data from Remote Intersections with Traffic Cabinet Monitoring

Data Aggregator DA-300 provides cost effective remote access to real-time traffic data from any isolated or networked intersection or arterial roadway. Easily interfaces with any make or model of traffic cabinet or controller, (NEMA, ATC or Type 170/2070). Provides traffic counts, split monitor timing and signal phase termination. Through an approved **iCITE Ready[™]** data analytics partner, the DA-300 can provide a myriad of Performance Measures data for Origin-Destination studies, Measures of Effectiveness, and the Purdue High Density data set for traffic signal optimization. Wi-Fi equipped and travel time ready.



FEATURES

- Monitors SPaT (Signal Phase & Timing Data) from any SPaT enabled traffic controller
- Split and Interval Timing Data
- "Travel time ready" through an iCITE Ready[™] data partner
- GPS-enabled for self-identification, location, mobile position tracking, and controller time clock sync
- SMS or eMail alarms sent for cabinet health and intersection faults
- Cellular Based communications with options of 3G/GSM/GPRS
- Internal 6 VDC battery back-up for alarms during power failure
- GPS provides Sync Pulse for Controller Time Coordination



- 5-Band Antenna Configuration
- Shelf or rack-mounted installation
- Wireless Bands Available: GSM/GPRS/LTE, GPS, BlueTooth, Wi-Fi, DSRC



DA - 300®

Connectivity	
Cell Modem	Yes - 3G/LTE/GSM/GPRS (Standard); 4G (Optional)
Wi-Fi	Yes - Travel Time (Receive only- Cannot be used as a WLAN)
Ethernet Port	Standard - 2 ports (10/100 Base -T)
EIA-232	Yes
SDLC	Standard (Easy connectivity with NEMA TS-2 controllers & MMU's)
USB	Standard - 2 ports
BlueTooth	No (Available as an option)
Aux. Ports (Qty. 8)	Standard (RS-485 inputs from Communicating Detectors)
Cabinet I/O	
Analog Inputs	16 (8 X 120 VAC; 8 X 24 VDC)
Digital Inputs	20 (16 X 24 DC; 4 X 24 VDC; 16 detectors; 4 peds)
Time Sync	Normally Open and Normally Closed with user selectable time
Digital Outputs	3 (either Normally Open and Normally Closed 5A relay)
Miscellaneous	
Operating System	Linux - Ubuntu 12.04.2 LTS kernel ver. 3.15.3
GPS	Yes - Geolocation with Time Sync
Operating Temperature	-40°F to 176°F / -40° C to 80° C / Standard Industrial temp. rate
Humidity	0 - 95% Non-Condensing
Dimensions	5.487" (D) X 8.18" (H) X 3.5" (W). (13.936 cm X 20.772 cm X 8.89 cm.)
Weight	3.6 lbs. / 1.62 Kg
Power Input Voltage	8 - 28 VDC (2A 250V 5mm X 20mm Fast-blo fuse)
Real Time Clock	Yes
Flash Disk	Yes
Battery Back Up	Yes - allows communications and remote logging up to ~5 hours
Battery	Non-Spillable Sealed Lead-Acid 6 VDC 4.5Ah
Protocols	
SDLC	Yes - Standard (TS2 or TS2 Type 2 cabinets only)
RS-485	Yes - Standard up to 32 channels of input
iCITE®	Yes - used to connect to iCITE G2®
Other	
Solar Power Capable	Yes
Antenna	Yes - 5 band (Cellular, GPS, Wi-Fi, BT and DSRC)
Notes: If a specific cellular carrier is preferred, or existing service plans will be used for cellular data, please specify carrier at the time of order. In USA only, deeply discounted plans can be provided along with the device from AT&T, T-Mobile or Verizon. International cellular providers need to be verified for device internal modem compatibility prior to order.	
*Custom configurations of Analog and Digital I/Os available for volume orders.	

FUNCTIONALITY

- Detector information from NEMA TS-1, TS-2, or Type 170/2070 cabinets using RS-485 Serial Communications for up to 32 channels
- (Optional) Monitors and logs Wi-Fi polling requests for Travel Time and Origin-Destination reporting in iCITE G2™ Cloud based software
- Detector and signal information from NEMA TS-2 cabinets using SDLC communications to provide additional data
- Remote access to non-interconnected intersections with 3G/LTE Cellular Communications
- Compatible with High-Speed Wired or Wireless Networks
- Provides back-up of critical communications from intersections that are connected to a central ATMS system
- Communications and interfaces use 2048-bit encryption to ensure both device and network security



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