DATA SHEET

RS-422/RS-485 Distribution Panel

Features That Make a Difference:

- Compatible with American Dynamics® MegaPower matrix switcher/controller systems, Intellex® digital video management systems, and RS-422 converter (RCSN422)
- Amplifies RS-422/RS-485 communications signals for multi-point dome control
- Supports home-run, daisy-chain, star, and junction box (J-Box) wiring topologies to accommodate any type or size system
- Accommodates home-run dome wiring via 16 output ports
- Install at head end or remote locations
- Rack (2U) or wall mountable
- Space-saving design allows mounting at either the front or rear of an electronics rack, facing in or out
- Surge suppression provided on all data and power connections
- ADAC422DP model includes power supply for multiple panels

The RS-422/RS-485 distribution panel amplifies either a RS-422 or RS-485 communications signal. With 16 outputs, the panel can accommodate home-run wiring, multiple daisy-chained links to SpeedDome programmable dome cameras or J-Boxes.

The panel also includes inputs for multiple MegaPower CPUs allowing you to maintain control from both the primary and backup CPUs, thereby providing a redundant solution. In addition, the panel can also accept RS-232 communication signals from MegaPower CPU or Intellex® digital video management systems where RS-232 is required. For diagnostic control you can monitor signal activities on each channel.

Installing the panel is easy, either at the head end or at remote locations and it can be used in place of a RS-422 J-Box when power is available for domes locally. The sleek, 2U design can easily be mounted on a wall or at the front or rear of an electronics rack, facing in or out.

The panel is the ideal choice for distributing RS-422 /RS-485 protocol to American Dynamics SpeedDome programmable dome cameras and J-Boxes.

AMERICAN DYNAMICS

SPECIFICATIONS

Model Numbers

ADAC422D ..... RS-422/RS-485 distribution panel (without external power module)
ADAC422DP ..... RS-422/RS-485 distribution panel (with external power module)

Physical

Dimensions (L x W x D) ..... 481 x 87 x 34 mm (18.9 x 3.4 x 1.3 in)
Body Length ..... 445 mm (17.6 in)
Weight ..... 0.75 kg (1.66 lbs)
Mounting ..... Standard electronic rack (2U), EIA310-D (19 in)
IEC 60297-1 (482.6 mm)
Wall mount

Electrical

Power Source ..... External power module
Certified limited power source required
Multiple panels may be connected to the maximum VA rating of the transformer
Input ..... 12 to 30 V DC or AC
Isolation not required
Frequency ..... 50-60 Hz
Power Consumption ..... 8 VA
Diagnostic Indicators
- Power On/Heartbeat ..... Green LED
- Host A, B, C Data Detect ..... Yellow LED
- Channel 1-16 Data Detect ..... Yellow LED
- Channel 1-16 Line Status Test Switch ..... Red/Green LED

Protection ..... Certified limited power source
NEC Class 2
Internal primary current fuse
Inrush limiting
DC isolation
Cable to Transformer ..... 5 m (16.5 ft)
18 AWG, 3-conductor
Input Connector ..... Euro-style 3-pin removable plug
5.06 mm (0.2 in) terminal block

Surge Protection
- Transient Voltage Suppressors (TVS) ..... 60 V, 250 A, 1.5 J
- Gas Discharge Tube Impulse Rate ..... 10 kA

Design Tolerance
- Input Voltage Minimum ..... 11 V DC or AC without dropout
- Input Voltage Maximum ..... >36 V DC or AC
- Input Frequency ..... 47 to 63 Hz
- Allowable Dropout ..... 150 ms

Surge Protection

RS-232 and RS-422 / RS-485 Ports

Transient Voltage Suppressors (TVS)
- Breakdown Voltage ..... 8.5 V ±20%
- Peak Current ..... 40 A
- Capacitance ..... 1200 pf at 1 kHz

Gas Discharge Tube Impulse Rate
- DC Breakdown Voltage ..... 90 V DC
- Insulation Resistance ..... 10,000 mΩ
- Capacitance ..... 2 pf max
- 8/20 µsec Impulse Discharge Current ..... 10 kA
- Ten 8/20 µsec Impulse Discharge Current ..... 5 kA

Environmental

Operating Temperature ..... -10° to 50°C (14° to 122°F)
Storage Temperature ..... -40° to 70°C (-40° to 158°F)
Relative Humidity ..... 0 to 95% noncondensing

Regulatory

EMC ..... 47 CFR, Part 15
EN 50130-4; EN55022
EN61000-3-2; EN61000-3-3
CISPR 22
Safety ..... UL/IEC/EN/CSA C22.2.60950-1
Environmental ..... RoHS 2002/95/EC
WEEE 2002/96/EC
IP code X0

DATA COMMUNICATION

Maximum Cable Segment ..... 1 km (3,300 ft)
Maximum Loads ..... 10 per cable segment
Topologies ..... Daisy-chain, star, home-run
Transmission Medium ..... Two twisted pairs 22 AWG (0.326 mm), polarized, shielded
Connector ..... Euro-style 3.5 mm (0.14 in) terminal block

Controller Devices ..... MegaPower 3200, MegaPower 48 Plus, Intellex® digital video management system, and RCSN422
Secondary Devices ..... SpeedDome programmable dome cameras, J-Boxes, and distribution panels
Repeaters ..... J-Boxes and distribution panels

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