

PRODUCT SPECIFICATION

DOCUMENT NUMBER DL1142	MODEL DL1142 RS422 Line Driver for transmission up to 4800 meters
REVISION NUMBER 091902	

DL1142



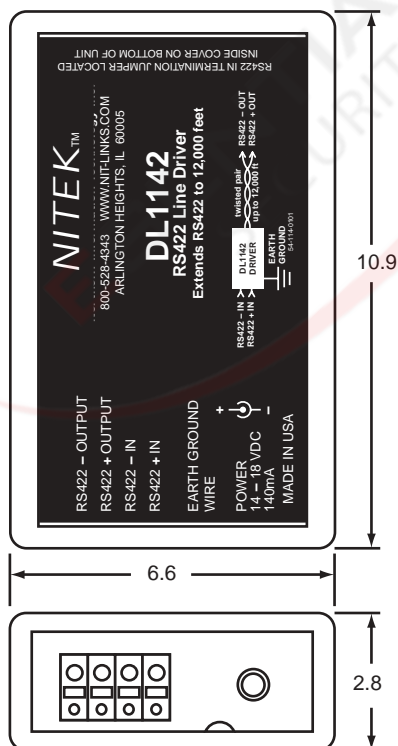
Description

The DL1142 system provides RS422 data transmission at rates up to 64K Baud for distances up to 4800 meters.

The DL1142 is designed for operation over Category 2, 3, 4 or 5 unshielded twisted pair (UTP) cables and standard 24 AWG telephone pairs. With this system it is unnecessary to use 18 AWG shielded pair. The unit works equally well over existing communication cables, computer network spares pairs or new cable installations. A highly balanced output design assures that the system will not interfere with other equipment on the network. The DL1142 is designed for easy connection to standard security equipment, including keyboards, matrixes, PTZ systems, access control systems, CPU units, etc.

DL1142 is a single unit that connects to twisted pair wires and RS422 via a screwless terminal block for 14 AWG to 26 AWG wires. This unit can be installed at the RS422 source or up to 1500 m away. The DL1142 outputs an RS422 signal that will go for an additional 4800 meters and allows up to 32 more RS422 devices to be connected in it.

The DL1142 works with RS422, Bi-Phase and any other RS422-type signals. Two systems will provide 4-wire RS485 up to 4800 m. The DL1142 can also be used to split off or "Y" a signal allowing an RS422 run to go in two directions. Using several units on a longer run will support a multi-drop application of the RS422 signal.



Features

- EIA standard input and output
- Data speeds of 64K Baud up to 4800 meters
- Built-in Surge suppression
- Balanced communication output can be run in the same cable with telephone, video and other computer signals
- Screwless terminal blocks allow easy connection to any wire type from 14 AWG to 26 AWG

Applications

- Keyboards** - extends keyboards for matrix and multiplexer control
- Access Control Systems** - between buildings and around campuses or remote gates
- Pan and Tilt Systems** - extends control signals to 4800m for all major manufacturers' equipment

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TECHNICAL SPECIFICATION

DL1142 RS422 Line Driver

The DL1142 is a single unit for use at the sending end.

Size	2.8cmH x 6.6cmW x 10.9cmD
Power Requirements	14-18 VDC @ 140mA (wall transformer provided with unit)
Input	EIA Standard RS422
Output	Amplified RS422 to meet and work with all EIA standard equipment to 4800 meters
Data Rate	up to 64K baud
Surge Protection	Built-in surge suppression is provided when earth ground connection is used
Temperature Range	-40 degrees C to +85 degrees C
Humidity Range	0 to 98%, non-condensing
Enclosure Material	Black ABS Flame Retardant Plastic

Ordering Information

PART	DESCRIPTION
DL1142	RS422 applications up to 4800 meters

Wire and Cable Recommendations

All NITEK data transmission systems are designed for use with **unshielded twisted pair** (UTP) wiring. The systems will operate over wire gauges from 24 AWG through 12 AWG. Category 2, 3, 4 or 5 cable may be used. Individually shielded pairs should be avoided, as they drastically reduce the operating range of the systems. Multi-pair cable with an overall shield is acceptable. The data communication signals can be sent in the same communication cable co-existent with telephone, computer, control signals, power voltages and video signals (where local codes allow). While they may be routed through telephone punch down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices **MUST BE** removed from the pair. For more specific information regarding wire types, gauges and proper installation techniques, please call +31(0)320 - 230005 for technical assistance.

