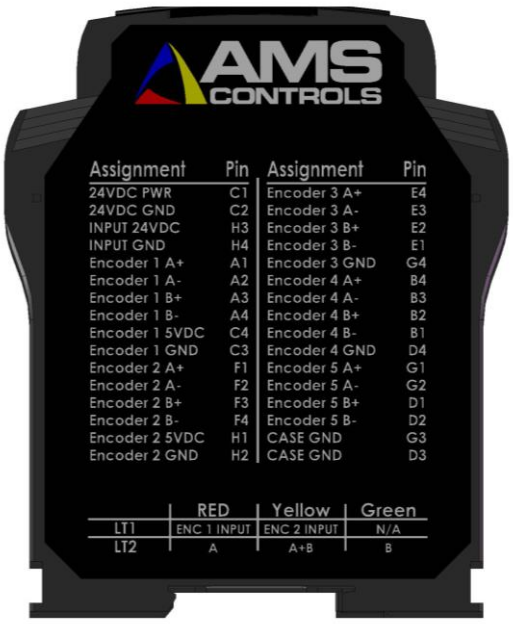


Splitter Module (6390)

Splitter Module (6390)

The Splitter module (6390) divides the encoder counts it receives for use by auxiliary components such as PLCs and printers. It provides several abilities, including:

- Driving multiple controllers from a single encoder
- Using multiple encoders on a single-encoder system

The Splitter is designed for use with 5-volt TTL logic quadrature encoders. It uses differential line driver outputs as well as single-ended transistor outputs.

Functions

The Splitter module features four specific functions:

- **Sharing one line encoder among separate controllers (up to four)**
  Up to four separate controllers can share the same line encoder using the Splitter module to divide the line encoder signal among them. The switches can divide counts for specific applications; you have the option to have the splitter pass along the exact count from the encoder, or divide the encoder count by 2, 3, 4, 6, 8, 12, 16, 24, 32, 64, and 128, depending on the output in use.
- **Dividing an encoder signal to communicate with different printer setups**
  By dividing the encoder counts by 2, 3, 4, 6, 8, 12, 16, 24, 32, 64, and 128, the Splitter can communicate with a wide variety of printer configurations.
- **Selecting between two encoder signals to send information to the controller**
  For a line with two encoders, the Splitter module can function as an “encoder signal selector” – counts from two encoders come to the Splitter, which then sends only one of them to the controller. For example, some applications require that one encoder be used to measure length and line speed up to a specified point in the line. After that point, a second encoder takes over sending information to the controller. The Splitter module provides the switching for the two encoders, based on a signal from an input device such as a sheet detect switch.
- **Communicating with peripherals that require input greater than 5 volts**
  Using transistor output, the Splitter module can communicate with a PLC or any other peripherals that require input greater than 5 volts.

Pin Assignment

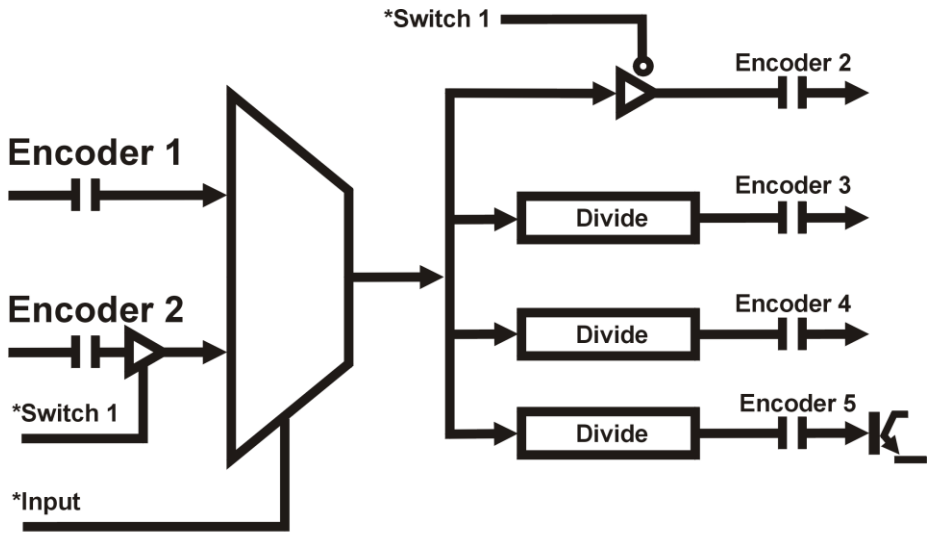
Pin	Assignment
A1	Encoder 1 A+
A2	Encoder 1 A-
A3	Encoder 1 B+
A4	Encoder 1 B-
B1	Encoder 4 B-
B2	Encoder 4 B+
B3	Encoder 4 A-
B4	Encoder 4 A+

Pin	Assignment
C1	24VDC PWR
C2	24VDC GND
C3	Encoder 1 GND
C4	Encoder 1 5VDC
D1	Encoder 5 B+
D2	Encoder 5 B-
D3	Case GND
D4	Encoder 4 GND

Pin	Assignment
E1	Encoder 3 B-
E2	Encoder 3 B+
E3	Encoder 3 A-
E4	Encoder 3 A+
F1	Encoder 2 A+
F2	Encoder 2 A-
F3	Encoder 2 B+
F4	Encoder 2 B-

Pin	Assignment
G1	Encoder 5 A+
G2	Encoder 5 A-
G3	Case GND
G4	Encoder 3 GND
H1	Encoder 2 5VDC
H2	Encoder 2 GND
H3	Input 24 VDC
H4	Input GND

Block Diagram



*Switch 1 = OFF = Encoder 2 Output On / Input Off
= ON = Encoder 2 Output Off / Input On
+ Input = OFF = Encoder 1 (Input) Selected
= On = Encoder 2 (Input) Selected

Note: All encoder inputs and input select line have electric isolation or galvanic isolation for preventing ground current.

Switch Settings

Enc. 3			
2	3	4	Div
0	0	0	1
1	0	0	2
0	1	0	3
1	1	0	4
0	0	1	6
1	0	1	8
0	1	1	12
1	1	1	24

Enc. 4			
5	6	7	Div
0	0	0	1
1	0	0	2
0	1	0	4
1	1	0	8
0	0	1	16
1	0	1	32
0	1	1	64
1	1	1	128

Enc. 5			
8	9	10	Div
0	0	0	1
1	0	0	2
0	1	0	4
1	1	0	8
0	0	1	16
1	0	1	32
0	1	1	64
1	1	1	128

Specifications

General:

DC Power Supply: 24VDC @ 200ma, 5W
Temp Range: 0° - 57° C (32° - 135° F)
Input Select: 24VDC, 15mA

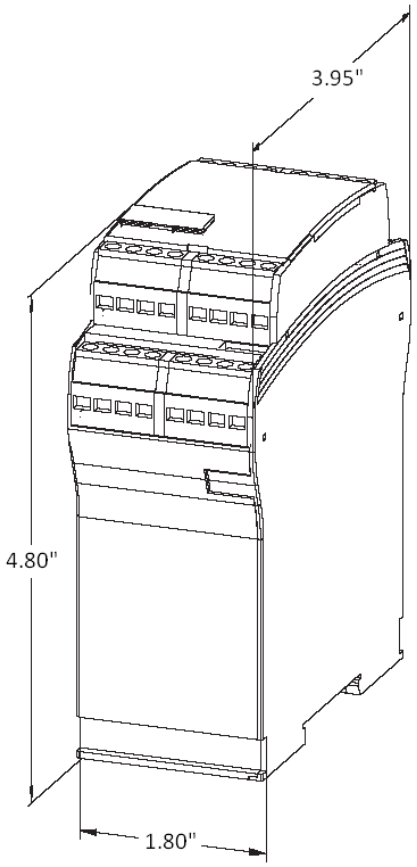
Encoder Input:

Encoder 1 and 2:
RS422, 250KHz per channel, 1M counts per second

Encoder Output:

Encoder 2, 3 and 4:
RS422, 250KHz per channel, 1M counts per second

Encoder 5:
3.3V - 12V @ 8mA, 12V - 50V @ 30mA
20KHz per channel, 80K counts per second



LEDs

	Red	Yellow	Green
LT1	Enc 1 Input	Enc 2 Input	N/A
LT2	A	A+B	B

Interface Drawing