

# E1SS-1040/80 E1 G.703 Digital Splitter

1:4 way/ 1:8 way Splitter for E1 G.703 Streams



**E1SS** Signal splitters create identical copies of E1/PRI signal streams.

**E1SS-1040** creates four identical outputs from a single E1 G.703 bitstream.

**E1SS-1080** creates eight identical outputs from a single E1 G.703 bitstream.

**E1SS** is widely used in applications including re-routing, failover systems and Lawful Intercept and is the Industry standard in DAB/DMB ETI duplication.

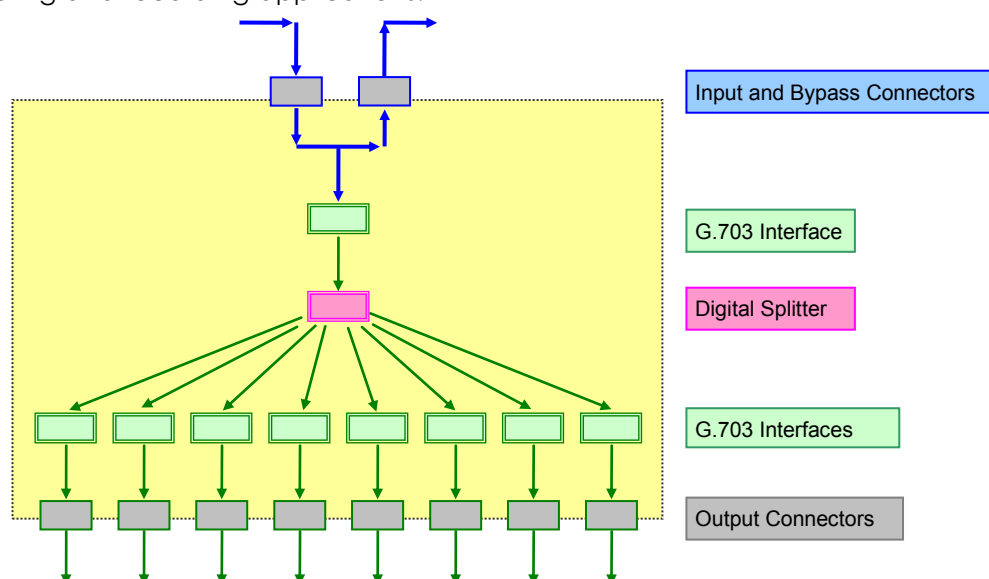
The source stream connection is made through two BNC connectors that are hard-wired in parallel. The original bitstream passes-through the Splitter without any in-line circuitry or delay.

Monitoring, recording and other equipment can be connected or disconnected at the outputs without disturbing the source bitstream, even when the Splitter is unpowered.

For compatibility with primary rate E1 Telecoms data, E1SS signal input/output interfaces incorporate ITU G.703 compatible receivers/drivers; common-mode line chokes; over-voltage protection and isolation transformers.

The unit is AC powered and supplied in a 1U rackmount case.

E1SS-1040 and E1SS-1080 are part of the E1SS product range, which also includes a programmable Router for E1, monitoring and recording applications.



**Specifications****Input***Signal Interface*

E1 compatible with ITU G.703

*Input impedance*

40 k $\Omega$  without supplied external terminator  
75  $\Omega$  with supplied external terminator fitted to the  
bypass BNC connector

*Input amplitude*

$\pm 2.37$  V  $\pm 10\%$  nominal, to -12dB  
 $\pm 5$  V maximum

*Pulse width*

230 ns to 260 ns

*Input jitter tolerance*

14UI @ 750Hz  
0.4UI, 10kHz to 100kHz

**Output***Signal Interface*

E1 compatible with ITU G.703

*Output impedance*

75  $\Omega$

*Output amplitude*

$\pm 2.37$  V  $\pm 10\%$

*Pulse width*

244 ns nominal

*Output jitter attenuation*

10dB/decade from 10Hz  
Meets the requirements of ITU G.736 and I.431

*Input to Output Delay*

Minimum: 1  $\mu$ s  
Maximum: 16  $\mu$ s  
Typical: 8  $\mu$ s

**Status Indicators**

Power  
Signal presence

**Input/Output Connections***Data*

BNC

*AC Power*

3-pin IEC

**Power***Supply*

85V -264V, 47Hz - 63Hz, universal input

**Physical**

1U rackmount chassis

*Dimensions*

482mm x 105mm x 44mm

*Weight*

1.6kg

**Environmental***Temperature*

0°C to 70°C

*Relative Humidity*

5% to 95% non-condensing



E1SS-1080 Rear Panel