BSS
Best Source Selector

Select The Best Telemetry Source, in Real Time

Safran Data Systems Best Source Selector (BSS) is the perfect tool to select the best Telemetry source received from multiple antennas tracking the same airframe, in real time.

BSS automates selection of the best TM stream from up to 8 sources using signal quality criteria and other metrics. BSS extensive capabilities in paths alignment & delay compensation makes the best source selection possible whatever are the locations of the antennas, and cope with any range infrastructure.

ANY INPUT SIGNAL
Analog (Video) or PCM (Data) interface
2, 4 or 8 inputs

ANY OUTPUT SIGNAL
Data output on multiple PCM (Data & Clock, TTL or RS422) and on Ethernet according to IRIG 106 Chapter 10

MULTIPLE SELECTION CRITERIA
Selection based on analog signal quality, majority vote, frame synchronization, DQE/DQM...

DQE/DQM – IRIG 106-17
Selection of the best source based on DQE/DQM information inserted by the TM receiver TM receiver agnostic

EASY INTEGRATION
- 2U rackable chassis
- Local (using KVM) & Remote user friendly GUI

MISSION CRITICAL
- Redundant power supply for safe operation
- Design based on Safran Data Systems Cortex experience
DATA SELECTION

Selection of Best Source through:
- Signal quality given by the Bit Synchronizers (based on Eb/No)
- Signal quality given by the Frame Synchronizers
- Bit by bit majority vote from the different inputs
- Signal quality provided by the receivers through DQE/DQM (option)
- Signal quality provided by the error correction blocks
  Viterbi, RS, LDPC (option)

PATH ALIGNMENTS

Reference stream determination
Synchronization ................. Up to 65535 samples latency absorption
........................................corresponding to >600km distance difference
between paths at 30 Mbps
The synchronizations are performed by correlation algorithm
Synchronization compliant with data encryption

GLOBAL SALES

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