

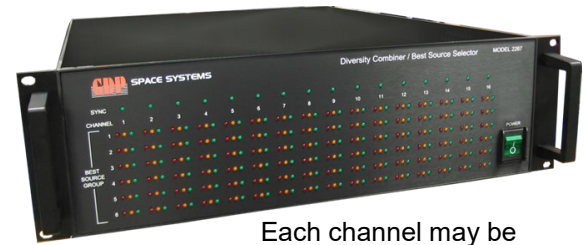
Diversity Combiner / Best Source Selector

Features

- Auto Correlation / Diversity Combining of Received Data Streams
- Performance Gain Over 5 dB
- Up to 16 channels per chassis
- Accepts Data & Clock or Optional Data Input/ Output Ethernet
- Independent Ethernet Control & Optional Ethernet Data Ports
- 4 or 6 Best Source Output Groups
- Bit Rates
 - 5 bps to 20 Mbps (40Mbps Opt)
- Accepts NRZ-L Data & Clock or Data in Ethernet packets [per channel]
- Input streams auto-correlated
- Encapsulated Data Input
- Data Quality Source
 - GDP 2265EC Bit Synchronizer
 - GDP 4426 Receiver
 - RCC DQM/DQE
- Best Source Criteria
 - Data Quality
 - Bit-by-Bit Majority Vote
 - Frame Pattern Analysis
 - Mixed Modes
- Down-stream devices receive the highest quality data. Frame synchronizers maintain lock.
- Seamless Output Stream Production on bit boundaries
- Input De-randomizer
- Output Randomizer
- .Remote Control via
 - Ethernet
- 5.25-inch High Chassis
- Includes Virtual Interface Control Software
- Support included in GDP / Delta TRMS (Telemetry Range Management System) Software.

General

The GDP Model 2267C Correlating/ Diversity Combining Best Source Selector accepts up to sixteen input data streams.



Each channel may be from digital data & clock or from Optional Ethernet Input packets.

Each channel is independently assigned to one of up to six Best Source output processing groups.

The optimized digital design affords the highest performance characteristics. The standard unit accepts input streams to 40 Mbps.

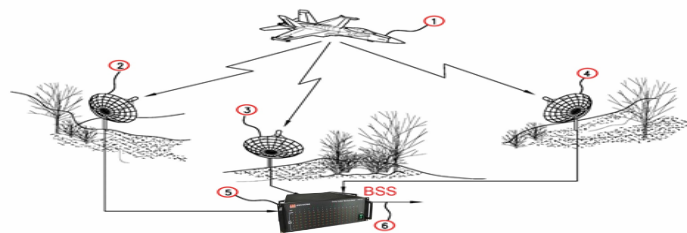
The standard IRIG randomizer/derandomizer for both forward and reverse sequences is provided. The input data streams may be Encapsulated data as produced by GDP Encapsulating Bit Synchronizers such as the model 2265EC Bit Synchronizer, model 4426 Telemetry Receiver, devices that provide the RCC DQM/DQE encapsulation technique or pattern detector modes..

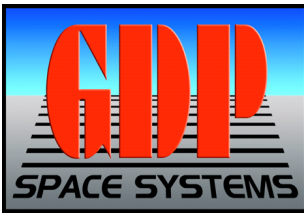
Best Source Selection of Non-Encrypted and Encrypted Data is based on Signal Quality as well as Weighted Majority Voting. The Best Source output is not only the Best Stream Source; but, also the best Bit Source.

The GDP Space Best Source Selector is an advanced, next generation implementation of best source selection based on signal/data quality. Since signal quality is used in the primary decision making process, the unit does not need to see a frame synchronization pattern; therefore, the data can be encrypted. Remotely located GDP Receivers and/or Bit Synchronizer Encapsulators or 3rd party systems that support RCC DQE/DQM provide signal quality information within the Encapsulated data stream, which is used in the best source decision process. Modes that do use the frame sync pattern for quality are also supported. The selected best source data is produced seamlessly at the bit level. The Best Source construction technique is so efficient that individual good bits are substituted for bits in error.

As long as good bits exist in the applied sources, down-stream frame / format synchronizers remain in lock.

Over 5 dB performance improvement is realizable.

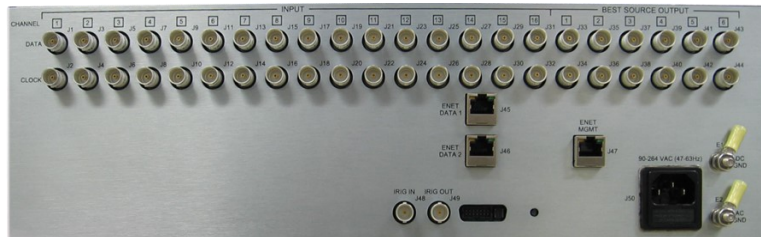




Diversity Combiner / Best Source Selector

Specifications

- Input Channels 16 Input Streams Data / Clock or Ethernet
- Output Selection Criteria Signal Quality, Pattern Lock, Majority Vote
- Best Source Groups 4 Best Source Groups (6 BSS Groups Optional)
- Channels Per Group 2 to 16 Channels per Group
- Delay / Latency Compensation Programmable Maximum Source Latency
- Data Correlation Sources Correlated
- Data Switching Seamless switch on bit boundaries Majority Vote
- Modes
 - GDP DQE/DQM Decapsulates data and quality information from MD2265EC or MD4426 remote encapsulation units. This is a higher performance bit-by-bit quality. Processes short-term and long-term data quality information per GDP specification #680-2265EC-04.
 - RCC DQM/DQE Decapsulates & Processes Data and Quality information from remote sources per IRIG-STD.
 - Digital Signal Quality Bit-by-Bit Voting, Frame Pattern Synchronization
- Size 5.25" X 22" X 19"
- Weight 25#
- Environment 10⁰C to 40⁰C
90 VAC to 264 VAC, 47 Hz to 63 Hz Auto Sensing



Base Unit: TTL Data & Clock Inputs (No Bit Syncs), All GDP Modes Ethernet Remote Control, GUI, Chassis Slides. The '-EN' version includes OP2267-45.

Ordering Information

BASIC UNIT:

- MD2267C-M16-G4 16 Channels, 40Mbps, Four BSS Groups
- MD2267C-M16-G6 16 Channels, 40Mbps, Six BSS Groups
- MD2267C-M16-G4-EN 16 Ch, 40Mbps, Four BSS Groups, Enet I/O
- MD2267C-M16-G6-EN 16 Ch, 40Mbps, Six BSS Groups, Enet I/O

OPTIONS:

- OP2267-40 Add 2 additional BSS Group Outputs (6 Total)
- OP2267-45 Ethernet Input/Output Supporting RCC DQE/DQM (22 Channels 16 In and 6 Out)
- OP2267-46 RCC DQE/DQM (Data/Clock Only I/O-NO ETHER NET DATA I/O)
- OP2267B-50 Redundant Power Supply
- OP2267B-89 Chassis Slides

* Recognizing that no standard product can meet all the needs of all users, GDP stands ready to provide units tailored to unique applications.
* The statements in this data sheet are not intended to create any warranty, expressed or implied. Specifications are subject to change without notice.