



Features

- E1/T1 Frequency Distribution
- Low Phase Noise
- High Channel Isolation
- Twelve Channel Output Distribution
- Daisy Chain for up to 48 outputs

6520A Telecom Distribution Module



Overview

The DATUM 6520A Telecom Distribution Module is a twelve channel distribution amplifier packaged in a 1U rack mount chassis. It is comprised of twelve low phase noise amplifiers that maintain high channel isolation (>60dB). Up to four units can be daisy chained together to give up to 48 outputs to give almost infinite expansion capability with virtually no signal degradation.

The 6520A standard configuration takes a single telecom clock signal, either T1 or E1, and provides twelve buffered T1 or E1 outputs. Each output and input has an alarm indicator that warns of either a loss of signal or a signal of insufficient amplitude.

The 6520A is ideal for manufacturers who need to distribute high quality telecom reference signals to multiple locations

The 6520A is also available in custom configurations. Please contact Datum - TT&M with any specific requirements.



datum

Timing, Test & Measurement



6520A Telecom Distribution Module



Specifications

ELECTRICAL SPECIFICATIONS

Output (12)

| | |
|-----------------|---|
| Frequency Level | T1 (1.544 MHz) or E1 (2.048 MHz) per G706/10 or G706/13 |
| Isolation | >60db |
| Connectors | 9-Pin, D-Male Optional: RJ45 |

Additive SSB Phase Noise

(1 Hz Bandwidth) Offset from carrier

| | |
|----------|----------|
| 1 Hz | -120 dbc |
| 10 Hz | -135 dbc |
| 100 Hz | -145 dbc |
| 1000 Hz | -155 dbc |
| 10000 Hz | -160 dbc |

Input

| | |
|-----------------|--|
| Frequency | 1.544 MHz or 2.048 MHz per G706/10 or G706/13 |
| Input Impedance | 110 Ω (T1) or 120 Ω (E1) |
| Connectors* | (2) 9-Pin D-Female Optional: (2) RJ45 *(1 Input, 2nd to daisy chain off) |
| Ground | #8 Stud post |
| Switch | Two position slide for HI Z and 50 Ω input impedance terminus |

Alarm Output

Summary alarm indicates failure of any output signal.

| | |
|--|---|
| Each Output & Main Non-alarm condition | Red LED Relay energized (fail safe) C Form contacts |
| Connectors | 9-Pin D-Male |

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

| | |
|--------------------|---|
| Temperature | 0° to 50°C |
| Relative Humidity | 0 to 95% (non-condensing) |
| Power Requirements | AC Input (+/-15%) 120 or 230 V AC, <10W DC Input (optional) 22 to 56 V DC, 10W |
| Dimensions | Height 1U (~1.75 inches) Width 19 inches Depth 10 inches |
| Weight | <5 lbs. |

| Options | Option P/N |
|----------------------------|------------|
| • Front mounted connectors | DS1 |

DISTRIBUTION MODULES

