

# Features

- Four Configurable Paired Outputs
- Rack Mount or Bench top
- Ideal for Remote Test & Measurement
- Compact & Light weight
- Meets G.703 ITU Recommendations
- Accepts 5 MHz or 10 MHz Frequency Reference



# DISTRIBUTION MODULES

## 6705 Telecom Synthesizer



# Overview

The Datum 6705 is a four-channel, telecom synthesizer packaged in a 1U rack mount chassis. The 6705 accepts either a 5 MHz or 10 MHz input signal from an external frequency reference source to synthesize and distribute four separate telecom output signals.

The instrument employs a board module system of paired outputs for optimum configuration flexibility. It is available with both board modules as paired clock out-

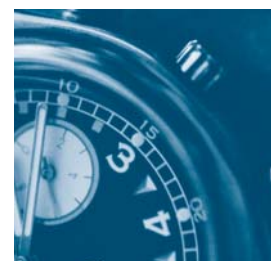
puts or alternatively with both modules as paired framed outputs, or with one framed module and one clocked module. The choice of Framed or Clocked configuration is factory set. The balanced or unbalanced mode may be independently selected for each output by a rear panel switch.



# datum

Timing, Test & Measurement

# 6705 Telecom Synthesizer



## Specifications

**DISTRIBUTION MODULES**

### ELECTRICAL SPECIFICATIONS

#### Telecom Outputs

|                |  |
|----------------|--|
| Frequency      | 1.544 MHz (T1) and/or 2.048 MHz  |
| Level          | T1: ANS1 T1.102 DS1<br>E1: G.703/6 (Framed)<br>G.703/10 (clock)                              |
| Load Impedance | T1: 100 Ω (balanced) or<br>75 Ω (unbalanced)<br>E1: 120 Ω (balanced) or<br>75 Ω (unbalanced) |
| Connectors     | BNC x4 (unbalanced) or<br>TWINAX x4 (balanced)   |

**Note:** Choice of Framed or Clocked configuration is factory set.

#### RF Input

|                    |   |
|--------------------|---|
| Frequency          | 5 MHz or 10 MHz                               |
| Amplitude          | 0.9 to 1.5 V rms into 50Ω                     |
| Connector          | BNC x1  |
| Daisy chain output | BNC x1  |
| Impedance          | Switchable between HI Z (infinite)<br>and 50Ω |

#### Alarm Output

Summary alarm indicates failure of the input signal or power loss on the form-C contacts and the front panel LED.

|                    |              |
|--------------------|--------------|
| Form-C contacts    |              |
| Alarm O/P Disable: | Panel switch |
| Connector type:    | 9 pin D-male |

### ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

|                         |                            |
|-------------------------|----------------------------|
| Temperature (operating) | 0° C to 55° C              |
| Relative Humidity       | 0 to 95 % (non-condensing) |
| Power Requirements      |                            |
| AC Input (+/-15%)       | 120 or 230 V AC, <10W      |
| Dimensions              |                            |
| Height                  | 1U (~1.75 inches)          |
| Width                   | 19 inches                  |
| Depth                   | 12 inches                  |
| Weight                  | <10 lbs.                   |

| Options                    | Option P/N |
|----------------------------|------------|
| • Front mounted connectors | 502        |



Specifications subject to change without notice.