

## 8-Channel Digital Sharing Device

## **FEATURES**

**PulseSupply** 

- Operates with any combination of 8 DTEs or DCEs
- Synchronous or asynchronous up to 19.2 kbps
- RTS/DCD or data contention
- DCE/DTE switch for main and each sub-channel
- Automatic disabling of sub-channel in event of streaming
- Individual sub-channel manual disable switches
- Internal or external clocks
- 1U height for minimal rack space
- Cascadeable
- Easy to install and configure

## **DESCRIPTION**

■ The RSD-10 Digital Sharing Device enables up to 8 modems or terminals to share a master modem, a multiplexer or a computer port in a multipoint environment. It operates at seven selectable data rates up to 19.2 kbps, synchronously or asynchronously.



- Three clock modes are supported:
- 1) Internal
- 2) External from the main channel
- 3) External from DCE connected to sub-channel 1.

A built-in buffer overcomes clock differences between the modem clocks connected to the sub-channels and the RSD-10 main channel transmit clock.

- An additional buffer can be switch-selected for equipment which must provide clock to multiple sub-channels. (Examples are D.D.S. in the U.S., any digital service in other countries, or modems that cannot be set to an external clock.)
- Information is broadcasted by the main channel to all sub-channels in parallel. Sub-channels contend to transmit to the main channel by activating RTS/DCD, or by data transition (strap-selectable). If the RTS/DCD or data of a sub-channel is active, the sub-channel's transmit data and control signals are connected to the main channel. When RTS/DCD drops or data transmission ceases, the control circuitry switches to monitor other sub-channels.

- A sub-channel is disconnected immediately after it drops RTS/DCD or transmits 16 idle bits.
- To prevent blockage to other sub-channels in event of streaming, a sub-channel can be disabled by automatic circuitry if it remains active for longer than a preset time. The automatic disable resets whenever the sub-channel RTS/DCD drops, or 16 idle bits are transmitted (data contention). Front panel indication is provided for each sub-channel disabled by automatic circuitry. The sub-channel can be manually disabled from the front panel as an alternative.

Installation and configuration of the RSD-10 is simple. Minimal strapping adjustments enable easy installation and operation. All necessary crossover connections are performed internally, and only straight-through cables are used to connect the modems or terminals to the RSD-10. The RSD-10 is provided with special hardware for mounting in a 19" rack, occupying 1U in height.

## **SPECIFICATIONS**

#### Number of Sub-channels

Eight

#### Channel Configuration

Lowest priority: Sub-channel 1 Highest priority: Sub-channel 8

#### Sub-channel Selection

RTS/DCD or data contention (strap-selectable)

#### Sub-channel Deselection

RTS/DCD off or 16 bits of idle data (strap-selectable)

#### Sub-channel Disabling

Manual: Front panel switches Automatic:

If sub-channel remains connected for more than a preset time: 1.7, 13.5 or 108 seconds

#### Transmit Clock Source

- External derived from main channel
- External derived from sub-channel 1

#### Data Rates

Asynchronous:
Up to 19.2 kbps
Synchronous:
Internal clock:
1.2, 2.4, 4.8, 7.2, 9.6,
14.4, 19.2 kbps
External clock:
Up to 19.2 kbps

Specifications are subject to change without prior notification

#### Input and Output Interface

EIA RS-232-C/CCITT V.24, each DCE or DTE

#### Connectors

Nine D-type 25-pin, female

#### Controls

Eight manual sub-channel disable push-button switches; one per sub-channel

#### Indicators

Data: Displays data broadcasted

from main channel to

sub-channels

Activity: 8 LEDS: indicate which

sub-channel has gained access to main channel

Disable: 8 LEDs: indicate if

sub-channel has been disabled automatically RSD-10 power is on

# ON: Power

115/230 V, switchable (±10%); 47-63 Hz, 10 watts -48 VDC (±10%)

#### Physical

Height: 4.4 cm / 1.7 in (IU) Width: 43.1 cm / 17 in Depth: 20.8 cm / 8.2 in Weight: 2.0 kg / 4.4 lb

#### Environment

Temperature: 0-50°C /32-122°F Humidity: Up to 90%

non-condensing

### **ORDERING**

#### **RSD-10/\***

Digital Sharing Device

 \* Specify power supply:
 48 for -48 VDC (default is 115/230 VAC switchable)

Pulse Supply

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## **APPLICATION**

