

## High Density Intra-office Office Channel Unit Dataport

### Features

- Supports standard DDS 56 Kbps and 64 Kbps clear channel format.
- Provides Diagnostic Testing and performs Non-Latching OCU and CSU Loopbacks.
- Built-in diagnostic data generator/checker (511/2047) on each DDS loop.
- Transmit timing can be provided by an external DDS Office Composite Clock, an external DS-1 BITS clock (Building Integrated Timing Supply), or a recovered DS-1 network clock.
- Supports data rates of 56/64 Kbps for each DS-0.
- Each SC 5506 provides six OCU dataports, for a maximum density of 72 ports
- Front panel LED status indicators evaluate the dataport circuit; Front panel Bantam jacks provide test access.
- Power requirements are less than 5 Watts per card.
- Configurable through TEAM applications, through a Telnet connection via the SCM, or at the SCM craft (CTRL) port.
- Supports auto-configuration via the SCM.
- Downloadable operating code.

### Introduction

The SC5506 OCU-DP is used in DDS-like SS7 networks. Designed for installation in the SpectraComm system shelf with a SC5001 and an SCM card, four SC 5506 units will aggregate 24 DS-0s from an on-premise SS7 STP into one T1. The SC5506 provides the interface between 64 Kbps timeslots in four 4.096 Mb/s data highways on the shelf backplane and the DS-0 signal.

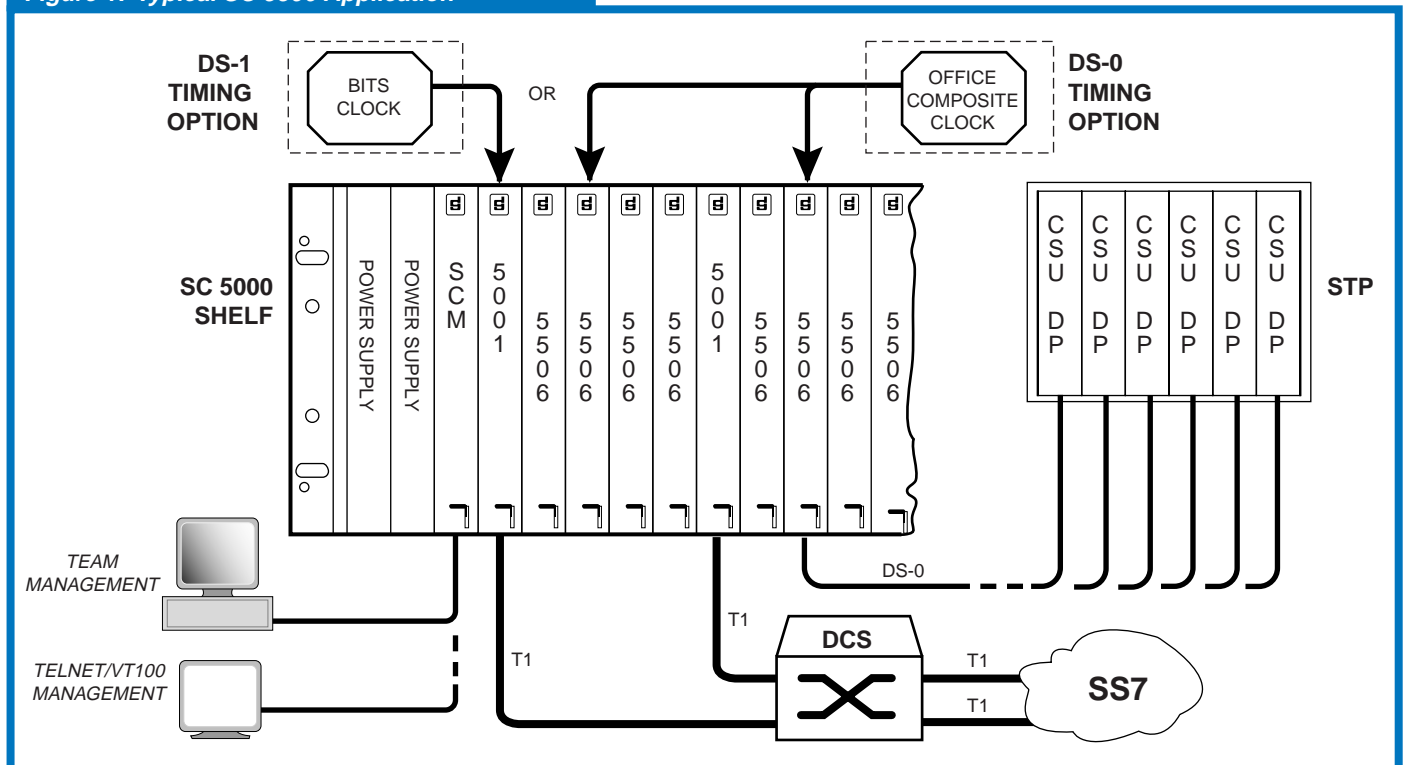
Transmission data occupies 64 kbps time slots on one of four 4.096 Mb/s SpectraComm backplane data highways. The SC5506 converts the data in the 64 kb/s timeslots (received via the SC5001) to a DS-0 bipolar RZ AMI 56/64 kb/s signal for connection to an on-site SS7 STP. 5001) on the T1 line.

### Typical SC 5506 Application

Figure 1 shows SC5506 units providing a maximum of 72 DS0 channels from the three SC5001 T1 lines. Transmit timing can be provided through various shelf configurations: by an external DDS Office Composite Clock, from an external DS-1 BITS Clock (cascade timing), or from recovered DS-1 network clock.

Test signals can be transmitted to the remote DS-0 via the front panel jacks. Manual loopbacks may also be performed via the front panel jacks.

Figure 1: Typical SC 5506 Application



## SC5506 Physical Specifications

### Single-slot Blade

Width: 178 mm (7.0 in.)  
Height: 21 mm (0.81 in.)  
Depth: 241 mm (9.5 in.)  
Weight: 0.28 kg (10 oz.)  
Shipping weight: 0.74 kg (1 lb 10 oz)

## Environmental Specifications

### Non-Operating

Temperature: -40 to 70 degrees C (-40 to 158 degrees F)  
Altitude: Up to 12,192 m (40,000 ft)

### Operating

Temperature: 0 to 50 degrees C (32 to 122 degrees F)  
Derate by 1 degree C/1000 ft above sea level  
Relative Humidity: 5% - 95% non-condensing  
Altitude: 0 to 3,048 m (0 to 10,000 ft)

## Electrical Specifications

Power (AC or DC), voltage, frequency, and fusing determined by your SpectraComm shelf or enclosure.

Power Dissipation: Less than 5 Watts

## Compliance & Compatibility

Safety: UL Approved

EMI: FCC Part 15 Approved

NEBS Level III Certified

Quality Assurance: ISO 9001: 2000 Certified

## Operational Specifications

### Modes of Operation

Point-to-Point  
Full Duplex (4-wire)

### Physical Interfaces

Front panel CTRL Port RJ45 to Local control  
Front panel Test Clock DB25M to DB9  
(test equipment)

### Operation

Data Rates: 56Kbps, 64 Kbps  
Signal Encoding:  
Bipolar Return to Zero, AMI, 50% duty cycle  
(per AT&T 62310)  
Network Control Codes:  
Non-latching OCU and CSU Loopbacks  
(56Kbps only)  
Terminating Impedance:  
135 Ohms nominal  
Operating Range:  
0 to 1500 feet (using 24 AWG, unshielded)

### Diagnostic Testing

DS-0 Line Loopback  
DS-1 Channel Loopback  
DS-0 Remote Loopback

