

DATA SHEET



## EX1200-7100

DC-26 GHz MICROWAVE SWITCH  
CARRIER & RELAY DRIVER

### FEATURES

Switch signals from DC to 26.5 GHz

Up to 9 (1 x 6) in only 1U rack size

Building blocks range from dual SPDT relays to SP6T relays,  
transfer switches and relay drivers

Microwave building blocks are "pluggable" from the front

Mix and match with any other EX1200 plug-in modules

Competitively priced modules to suit for OEM/system  
integration market



[www.vtiinstruments.com](http://www.vtiinstruments.com)

RELIABLE DATA FIRST TIME EVERY TIME

# OVERVIEW

The EX1200-7100 is a high-density microwave switch module carrier designed to work with EX1200 mainframes. It complements the EX1200 platform with the configurable microwave switch modules that provide high switching density. Each carrier can accommodate three specially designed miniature microwave relays of up to 26 GHz. Each microwave switch is "pluggable" from the front allowing for easy configuration and maintenance.

The EX1200-7100 functions as a relay driver for controlling external microwave relays that exceed available space in the EX1200 mainframe. Each EX1200-7100 allows for 8 control lines compatible with 24 V logic.

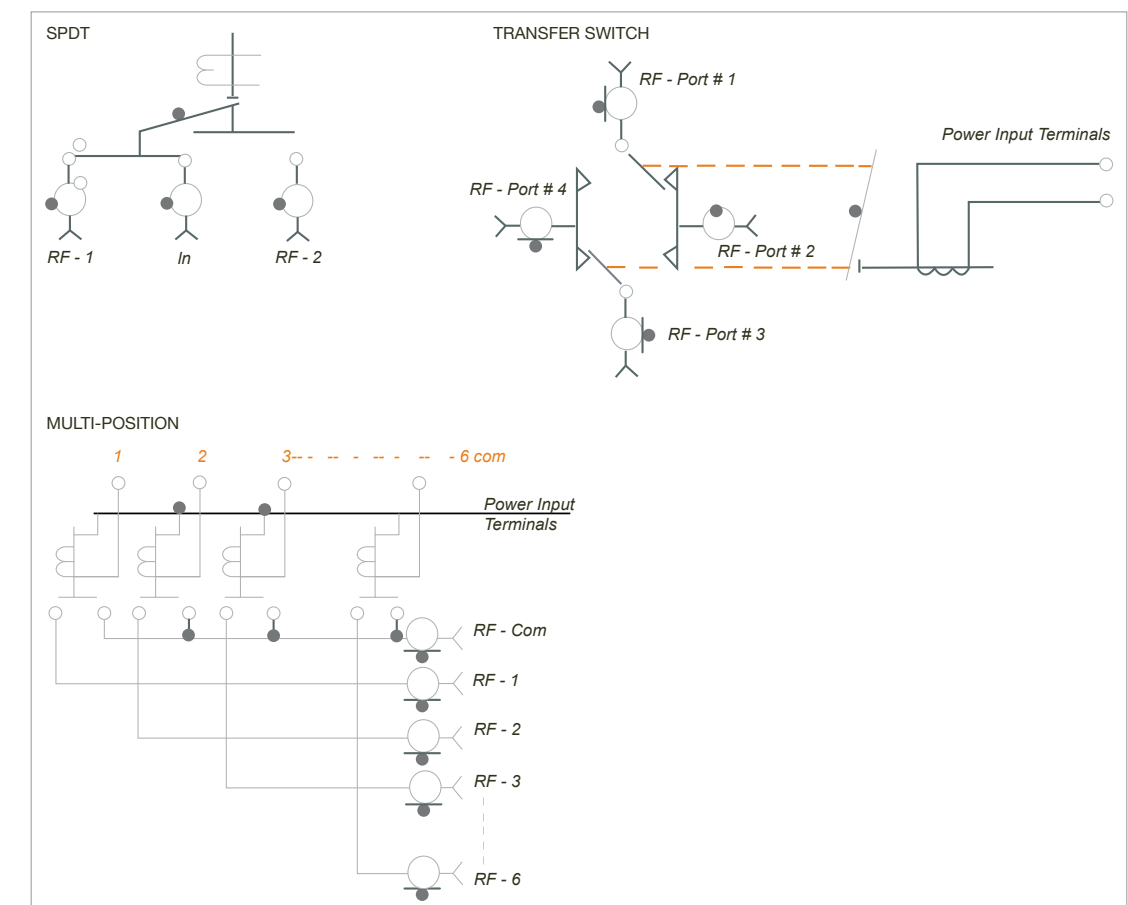
The EX1200-7100 module occupies the equivalent slot space of two plug-in-modules and can be mixed and matched with other EX1200 plug-in modules to configure high-density customized switching solutions. Up to 54 switch points can be switched within a 1U rack space in the EX1206 mainframe, as an example, providing exceptional density without degrading signal integrity.

Competitively priced, the EX1200-7100 series can reduce the cost of microwave switching by at least 20% from existing solutions and satisfy lower frequency cellular switching market needs.

## CONFIGURING YOUR OWN MICROWAVE SWITCH SYSTEM IN EX1200

1. Select required type and quantity of switch modules (from the below list).
2. Select required number of EX1200-7100 carrier units. Each carrier can hold up to three microwave switches occupying two EX1200 module slots.
3. Select required quantity of suitable EX1200 mainframes, accessories, and other plug-in modules (if necessary).
4. Contact VTI Instruments for price and delivery.

### BLOCK DIAGRAM



## General Specifications

AVERAGE POWER PER CHANNEL	40 W @ 26.5 GHz
SWITCHING TIME	< 15 ms
RF IMPEDANCE	50 $\Omega$
ISOLATION (dB MIN)	
DC-3 GHz	80 dB
3-8 GHz	70 dB
8-12.4 GHz	60 dB
12.4-18 GHz	60 dB
18-26.5 GHz	45 dB
INSERTION LOSS (dB MAX)	
DC-3 GHz	0.2 dB
3-8 GHz	0.3 dB
8-12.4 GHz	0.4 dB
12.4-18 GHz	0.5 dB
18-26.5 GHz	0.7 dB
VSWR MIN	
DC-3 GHz	1.2:1
3-8 GHz	1.3:1
8-12.4 GHz	1.4:1
12.4-18 GHz	1.5:1
18-26.5 GHz	1.7:1
CONNECTOR TYPE	SMA

## Ordering Information

EX1200-7100	DC-26 GHz microwave switch carrier & relay driver
EX1200-7102	Dual (SPDT) 26.5 GHz relay (unterminated)
EX1200-7104	SP4T 26.5 GHz relay (unterminated)
EX1200-7106	SP6T 26.5 GHz relay (unterminated)
EX1200-7122	26.5 GHz transfer switch (unterminated)