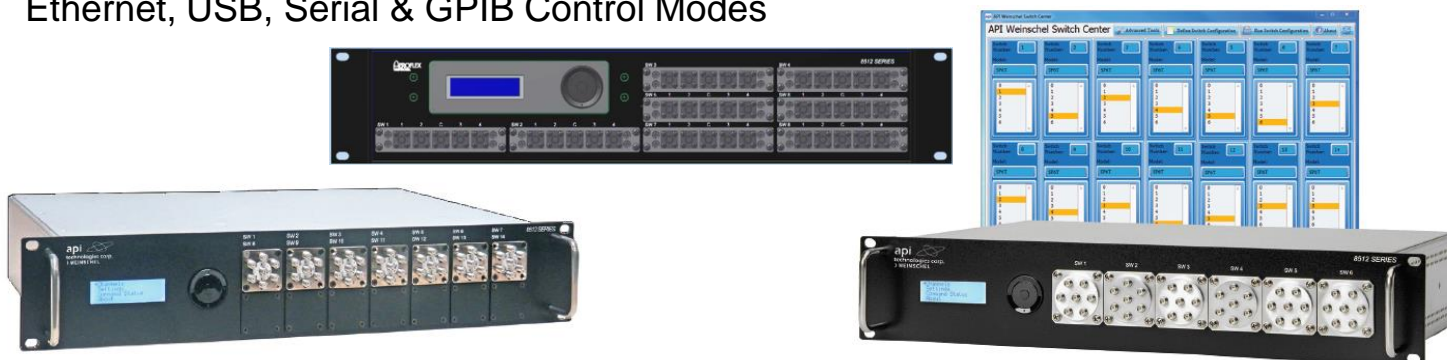


# Multichannel Switch Unit– DC to 40 GHz

Ethernet, USB, Serial & GPIB Control Modes



## Description

Weinschel’s Model 8512 Series of Programmable Switch Units offers a compact, yet expandable, rack mount solution for a variety of test, subsystem, and system applications. The Model 8512 Series is available in Electro-mechanical or solid-state switch options that operates over the DC to 8/18/26.5/40 GHz frequency range.

## Specifications:

RF Specifications (Switch Types A & B)				
Frequency Range (GHz)	DC-3	3-8	8-12.4	12.4-18
VSWR (Max)	1.20:1	1.30:1	1.40:1	1.50:1
Insertion Loss (dB Max)	0.2	0.3	0.4	0.5
Isolation (dB Min)	75	70	60	60
RF Power Thru (Watts CW)	95	55	45	35
Hot Switching Rating (Watts CW)	1	1	1	1

RF Specifications (Switch Type C)					
Frequency Range (GHz)	DC-6	6-12	12-18	18-22	22-26.5
VSWR (Max)	1.25:1	1.40:1	1.50:1	1.80:1	1.80:1
Insertion Loss (dB Max)	0.2	0.4	0.5	0.6	0.8
Isolation (dB Min)	70	60	60	50	50
RF Power Thru (Watts CW)	60	45	35	30	25
Hot Switching Rating (Watts CW)	1	1	1	1	1

## Additional Specifications

AC Voltage	100 – 240 V, 50/60 Hz
AC Power	100 Watt Max
Operating Temperature	-20° C to +65° C
Storage Temperature	-40° C to +75° C
Humidity	20-90% (Non-Condensing)
Operating Altitude	10,000 ft.
Non-operating Altitude	40,000 ft.
Control Connectors	<ul style="list-style-type: none"> <li>9-PIN D (Male)</li> <li>Mini-B USB</li> <li>Standard RJ45</li> </ul>
Test Data	Test data available upon request

## Control Software Included

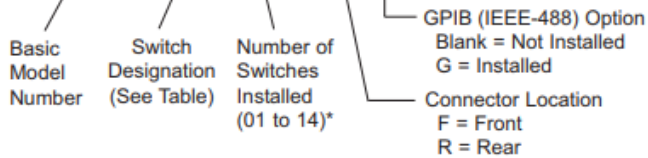
Weinschel’s LabVIEW based Switch Control Center Software (SCCS) is to be used in conjunction with the operation of the Weinschel 8512 series of programmable switch units. The SCCS will allow the user setup, control and perform tests and measurements using these programmable switch units over standard communication interfaces



RF Specifications (Switch Type D)						
Frequency Range (GHz)	DC-6	6-12	12-18	18-27	27-34	34-40
VSWR (Max)	1.25:1	1.40:1	1.50:1	1.80:1	1.90:1	2.10:1
Insertion Loss (dB Max)	0.2	0.4	0.5	0.9	1.0	1.5
Isolation (dB Min)	70	60	60	50	50	50
RF Power Thru (Watts CW)	60	45	35	25	20	15
Hot Switching Rating (Watts CW)	1	1	1	1	1	1

**Part Number Structure**

**8512 - XX - XX - X G**



\* Up to 6 Channels for Option C

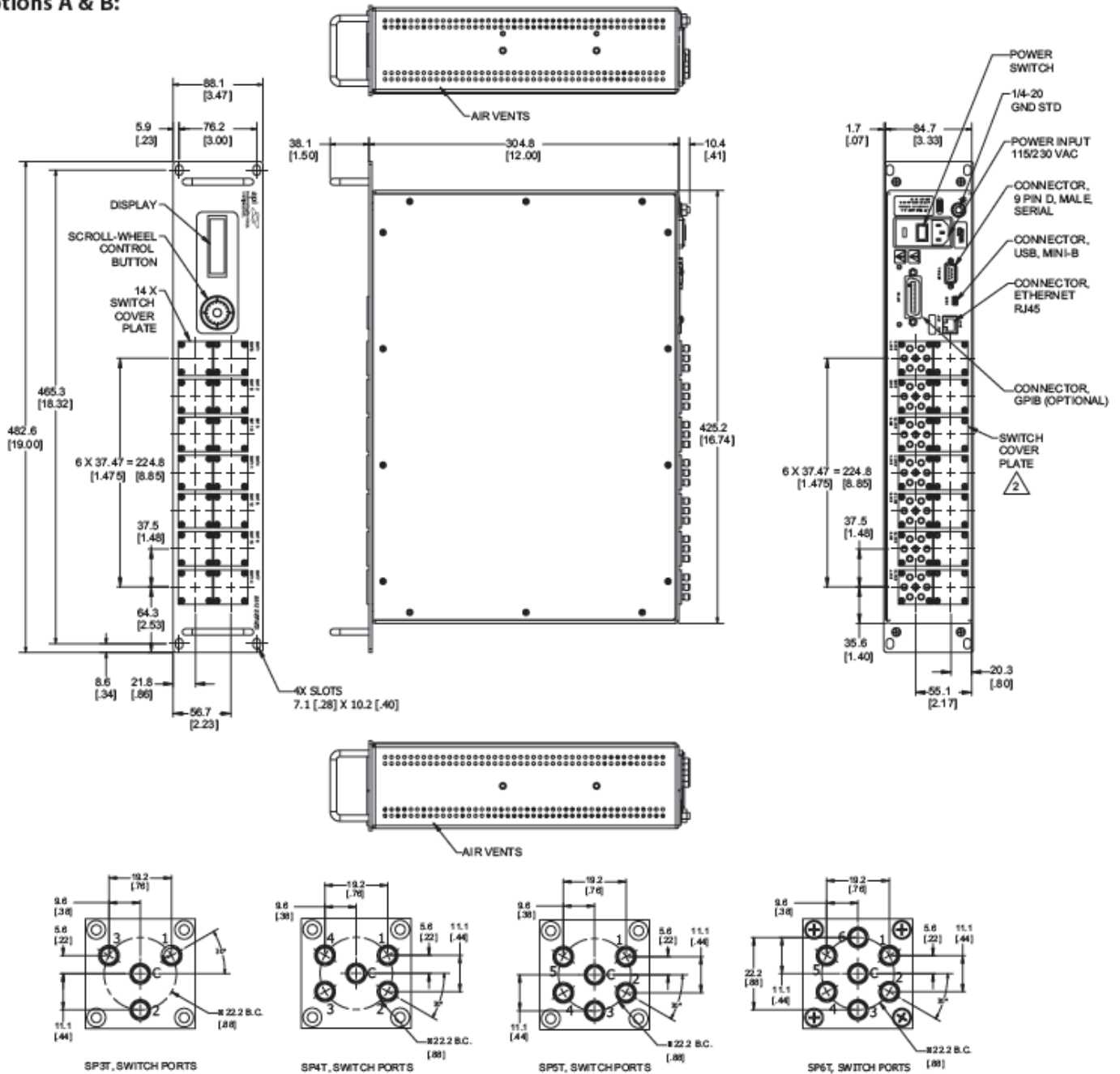
Example: 8512-A6-07-F

Electro-mechanical		
Switch Description	Switch Designation	# of Positions
DC-18 GHz Failsafe to open Make Before Break SMA Female	A3	SP3T
	A4	SP4T
	A5	SP5T
	A6	SP6T
DC-18 GHz Latching Make Before Break SMA Female	B3	SP3T
	B4	SP4T
	B5	SP5T
	B6	SP6T
DC-26.5 GHz Failsafe to open Break Before Make SMA Female	C3	SP3T
	C4	SP4T
	C5	SP5T
	C6	SP6T
DC-40 GHz Failsafe to open Break Before Make 2.92mm Female	D3	SP3T
	D4	SP4T
	D5	SP5T
	D6	SP6T
Solid-State		
0.01-8 GHz SMA Female	M4	SP4T (Terminated)

← See Model [4284A](#) Specifications

**Physical Dimensions**

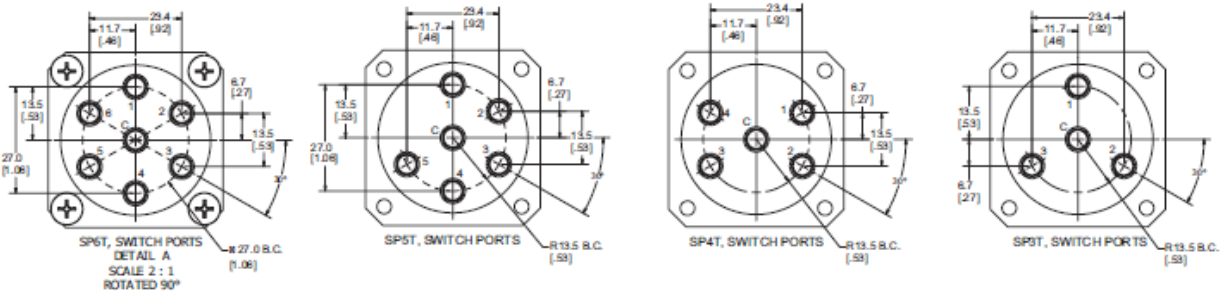
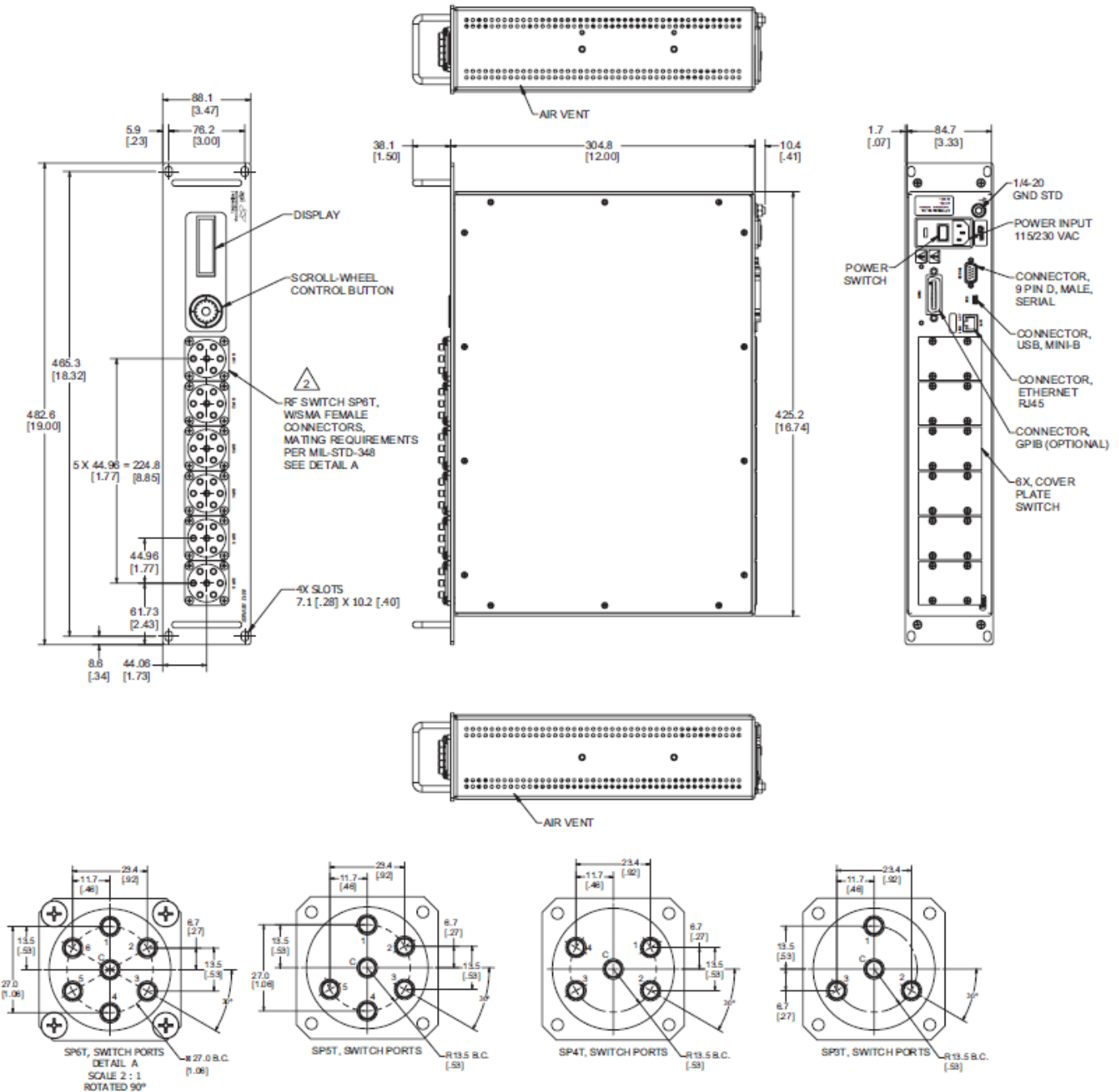
**Options A & B:**



NOTE:  
1. All dimensions are given in mm (inches).  
2. RF switches and switch plates as required and determined by configuration. Seven switch unit configuration shown.

**Physical Dimensions**

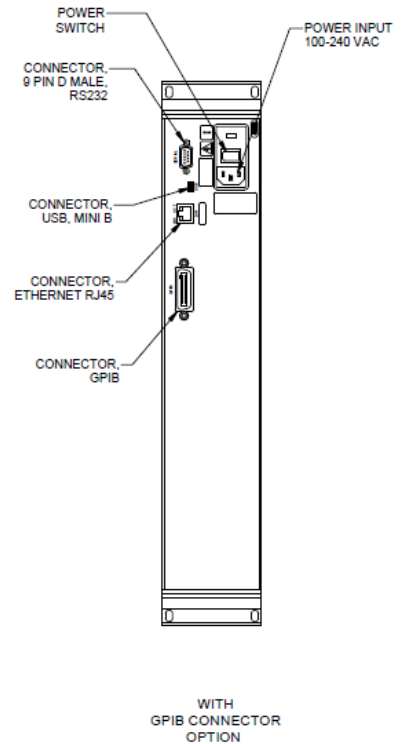
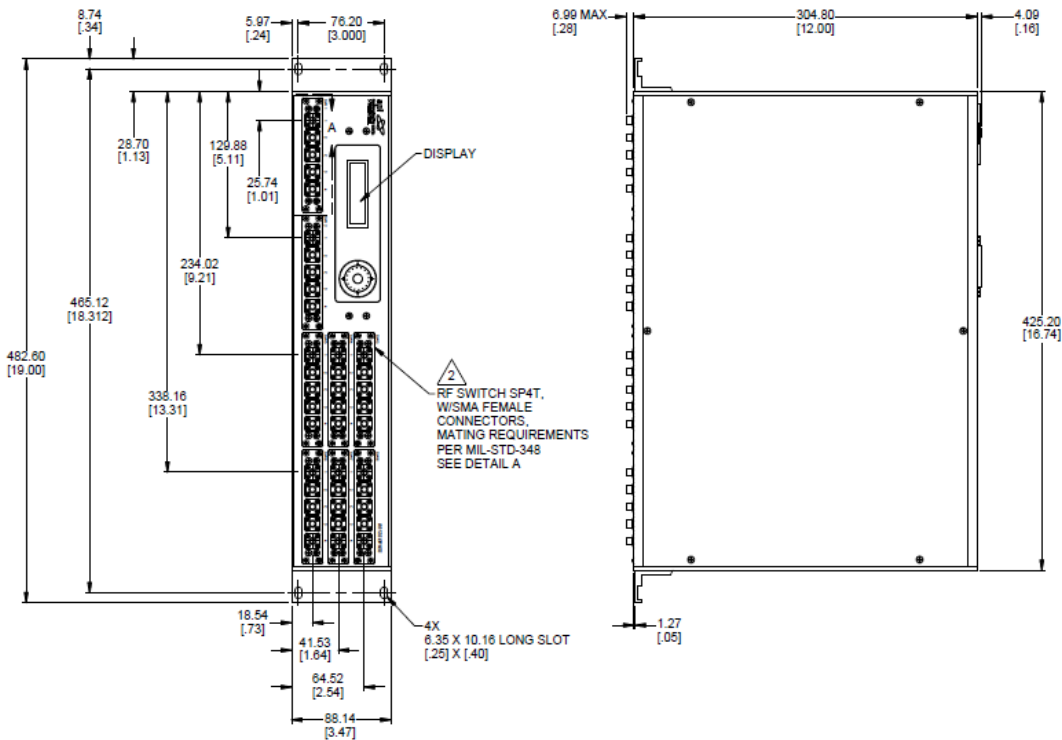
Options C & D:



- NOTE:
1. All dimensions are given in mm (inches).
  2. RF switches and switch plates as required and determined by configuration. Six switch unit configuration shown.

**Physical Dimensions**

Option M:



**NOTES:**

1. ALL DIMENSIONS GIVEN IN MM [INCHES].

2. SWITCHES AND HOLE COVER PLATES INSTALLED AS REQUIRED AND DETERMINED BY NUMBER OF SWITCHES IN UNIT. 8 SWITCH UNIT IS SHOWN.

3. ALL MATERIALS & PROCESSES ARE TO BE IN COMPLIANCE WITH THE EUROPEAN DIRECTIVE RESTRICTION OF HAZARDOUS SUBSTANCES (RoHS) (REF: WEINSCHEL 080-638)