100 MHz Switching Matrix

◆ **Solid State, Non-Blocking Switch Matrix**

◆ **DC to 100 MHz**

◆ **Ethernet, GPIB or RS-232 Control**

◆ **Ideal for Audio, Video and Telemetry Signal Routing Applications**

◆ **Configurable up to 64 Input   by 64 Output**

Racal Instruments 1258 switching unit provides a high-density capability for signal routing and switching of audio, video, telemetry, Electronic Intelligence, IF and other types of signals from DC to 100 MHz. Its solid-state, non-blocking logic provides a full fan-out capability; any input can be switched to multiple outputs The system is designed for low noise operation and maximum isolation of unselected signals.

The 1258 can be controlled by Ethernet, GPIB, or RS-232. It contains a PC-104 embedded controller and four (4) RS-232 outputs to control up to four (4) additional 1258 switching units. This enables an entire switching system to be managed with a single point of software control.

EADS
NORTH AMERICA
DEFENSE

GENERAL

Solid-State, Non-Blocking

Frequency Response

DC to 100 MHz (200 mV p-p)

Crosstalk

-60 dB @ 5 MHz (200 mV p-p)

Isolation

-85 dB @ 5 MHz (2 V p-p)

-110 dB @ 5 MHz (200 mV p-p)

Switching Time

6 ms

Switching Transient

15 mV p-p

OUTPUT

Impedance

50 Ω

Maximum Offset Voltage

±50 mV

Capacitance

18 pF

Current

20 mA to 40 mA

ENVIRONMENTAL DATA

Temperature

Operating: 0° C to 55° C

Storage: -40° C to 75° C

Relative Humidity

85% ±5% non-condensing, ≤35° C

Altitude

Operating: 10,000 ft.

Non-Operating: 15,000 ft.

Shock

30 g, 11 ms, ½ sine wave

Vibration

0.013 in.: (p-p), 5-55 Hz

Bench Handling

4-inch drop at 45°

EMC

Emissions/Immunity

EN61326:1997+A1:1998

SAFETY

EN61010-1:1993+A2:1995

RELIABILITY

MTBF

57,569 hours (each matrix card)
(MIL-STD-217E)

MTTR

≤5 min.

MECHANICAL

Weight

19 lbs.

Dimensions

3.5" H x 16.5" W x 19.5" D

CE **The CE Mark indicates that the product has completed and passed rigorous testing in the area of RF Emissions, Immunity to Electromagnetic Disturbances and complies with European electrical safety standards.**

ORDERING INFORMATION

MODEL/DESCRIPTION	PART NUMBER
Racal Instruments 1258, 64x64 Switching Matrix	407900-001
Racal Instruments 1258, 64x48 Switching Matrix	407900-002
Racal Instruments 1258, 64x32 Switching Matrix	407900-003
Racal Instruments 1258, 64x16 Switching Matrix	407900-004
Racal Instruments 1258, 64x64 Switching Matrix, SMA	407900-011
Racal Instruments 1258, 64x48 Switching Matrix, SMA	407900-012
Racal Instruments 1258, 64x32 Switching Matrix, SMA	407900-013
Racal Instruments 1258, 64x16 Switching Matrix, SMA	407900-014
Racal Instruments 1258 64x64 Switching Matrix, SMB	407900-021
Racal Instruments 1258, 64x48 Switching Matrix, SMB	407900-022
Racal Instruments 1258, 64x32 Switching Matrix, SMB	407900-023
Racal Instruments 1258 64x16 Switching Matrix, SMB	407900-024