### RANGR LITE

#### UNIVERSAL ACCESS TRANSCEIVER (UAT) ADS-B DATALINK SYSTEM

A summary of the RANGR Lite products and their capabilities is in the table below.

	RANGR TXL	RANGR XVRL
Model	FDL-978-TXL Transmitter includes internal WAAS/GPS sensor	FDL-978-XVRL Transceiver includes internal WAAS/GPS sensor
Capabilities	TSO Rule Compliant ADS-B Out	TSO Rule Compliant ADS-B In/Out
Link Frequency	978 MHz	978 MHz
Display Options	N/A	WiFi to Compatible Tablets

WIFI MODULE INCLUDED WITH XVRL INCLUDES ANTENNAS AND INSTALLATION KITS

#### **CERTIFICATIONS**

System	TSO-C154c (UAT) TSO-C145c (GNSS)	TSO-C157a (FIS-B) TSO-C195a (TIS-B/Traffic) TSO-C154c (UAT) TSO-C145c (GNSS)
Design Assurance	DO-160G DO-178B Level C DO-254 Level C SW/HW	DO-160G DO-178B Level C DO-254 Level C SW/HW
Installation Approvals	STC approved in accordance with AC 20-165A, AC 20-172A	

PHYSICAL CHARACTERISTICS (Includes RANGR TXL, RANGR XVRL models)		
Size (Includes Mounting Flanges)	1.7" H 5.0" W 5.8" D	
Weight	Less than 1 pound	
Transponder Interface	Mode A/C Mode S	
Interface	4 RS-232/422 1 RS-485 4 Discrete Inputs 2 Discrete Outputs	
Input Voltage	10-40 VDC	
Input Current (Max)	0.2 A at 12 VDC	

# **SERIAL-WIFI TRANSCEIVER**

**Certifications** PMA

FCC Identification T9JRN171-1

Physical Dimensions 1.0" H

3.1" W

4.0" D

 Weight
 2.9 oz (82.5 g)

 Operating Temp
 -40°C to +70°C

 Storage Temp
 -55°C to +85°C

**Power Requirements** 10–37 VDC, 40mA at 28 VDC

**Frequency** 2402 ~ 2480MHz **Receiver Sensitivity** -83dBm typical

## **TC-978 CONTROL HEAD**

**TSO Compliance** TSO-C154c (incomplete system)

TSO-C88b

**ETSO Compliance** ETSO-C88a

**Physical Dimensions** 1.8" H

2.5" W 2.0" D

Software DO-178B Level B

Panel cut-out Standard 2.25 inch

(round adapters provided)

**Weight** 0.11 lbs. (90 g) **Altitude** 35,000 ft.

**Power Requirements** 5.5–10 VDC,

provided by FDL-978 unit