

FLEXEDGE® Communication Sleds



FLEXEDGE® Intelligent Edge Automation Platform

One platform. Millions of configurations. Limitless potential.

- Configured using Crimson® software (version 3.2 or later)
- Powered and configured from DA host device
- Industrial rated for harsh environments
- Wide operating temperature range
- Simplified deployment architecture
- Field installable



Ordering Guide

Sleds

PART NUMBER	DESCRIPTION
DAS00CL9C1SAZ000	4G LTE CAT1 Sled with Telstra Support
DAS00CL9C4SAM000	4G LTE CAT4 Sled with Generic Profile for North American Carriers
DAS00CL9C4SEU000	4G LTE CAT4 Sled with Generic Profile for EMEA, SAARC, APAC Carriers
DAS00CL9C4SVZ000	4G LTE CAT4 Sled with Verizon Profile
DAS00PN1EE200000	Dual Ethernet Sled
DAS00PN2221IS000	2x RS232 ports (RJ12 connectors)
DAS00PN2442IS000	2x RS485/RS422 ports (RJ45 connectors)
DAS00PN2245IS000	1x RS232 port, 1x RS485/RS422 port (RJ12 and RJ45 connectors respectively)
DAS00PN40U400000	USB Host Sled
DAS00PN8CA6IS000	DA Series, CAN Protocol Interface Sled
DAS00PN8J16IS000	DA Series, J1939 Protocol Interface Sled
DAS00WF10N0AM000	Wi-Fi Sled

Accessories

PART NUMBER	DESCRIPTION
ANTMA741ABI001	2G/3G/4G LTE MIMO low profile direct permanent mount antenna, IP67 rated
ANTMA710AABI001	2G/3G/4G LTE MIMO plus GPS direct permanent mount antenna, IP67 rated

See software manual for details on sled operation.

Sled Specifications

All Sleds

Environmental

Operating Temperature Range: -40 to 75 °C T_{AMB}
Storage Temperature Range: -40 to 80 °C T_{AMB}
Vibration to IEC 60068-2-6: Operational 5-500 Hz, 2 g
Shock to IEC 60068-2-27: Operational 15 g
Operating and Storage Humidity: 0 to 95% max. RH
noncondensing
Altitude: Up to 2000 meters

Installation Requirements

Sled must be installed inside the unit case with the hardware provided.

Certifications And Compliances

CE Approved
EN 61326-1 Immunity to Industrial Locations
Emission CISPR 11 Class A
IEC/EN 61010-1
RoHS Compliant

ATEX Approved
Ⓜ II 3 G Ex ec IIC T4 Gc
DEMKO 20 ATEX 2268X
IECEX Approved
IECEX UL 20.0007X
UKEX Approved
UL22UKEX2576X
UL Hazardous: File # E317425
ABS Type Approval for Shipboard Applications

Warranty

3 years on design and manufacturing defects.

Specifications are subject to change.
Visit www.redlion.net for more information.

DA 4G LTE CAT1

Power Requirements

Power is supplied by the DA host controller.
Max Power: 3 W

Cellular Frequency Specifications

TECHNOLOGY	BANDS	ANTENNA CONFIGURATION *
Telstra		
LTE	1, 3, 5, 8, 9, 18, 19, 26, 28	MIMO Required
3G (fallback) **	1, 5, 6, 8, 19	Diversity Supported

* GPS antenna MUST be an active antenna.

** In regions where 3G is still supported.

Interfaces

Cellular: Two SMA Connectors
GPS: One SMA Connector

GPS

GNSS Supported: GPS L1, GLONASS L1, Galileo E1 and BeiDouB1
High RF Sensitivity plus jamming detection

Wireless/Carrier Compliance

Telstra

Antenna Connector

One front panel SMA-A main antenna connection
One front panel SMA-A GPS antenna connection
One front panel SMA-A Diversity antenna connection.

Sled Specifications Continued

DA 4G LTE CAT4

Power Requirements

Power is supplied by the DA host controller.
Max Power: 3 W

Cellular Frequency Specifications

TECHNOLOGY	BANDS	FREQUENCIES	ANTENNA CONFIGURATION *
North American Models (VZ/AM)			
LTE	2, 4, 5, 12, 16	B2 (1900), B4 (AWS 1700), B5 (850), B12/B13 (700)	MIMO Required
HSPA+ (fallback) **	2, 5	B2 (1900), B5 (850)	Diversity Supported
Rest of the World (EU)			
LTE	1, 3, 7, 8, 20	B2 (2100), B3 (1800), B7 (2600), B8 (900), B20 (800)	MIMO Required
HSPA+ (fallback) **	2, 5	B2 (1900), B5 (900)	Diversity Supported
GSM/GPRS/EDGE (fallback) **	3, 8	B3 (1800), B8 (900)	Diversity Supported

* GPS antenna MUST be an active antenna.

** In regions where 3G is still supported.

Interfaces

Cellular: Two SMA Connectors
GPS: One SMA Connector

GPS

GNSS Supported: GPS L1, GLONASS L1, Galileo E1 and BeiDouB1
High RF Sensitivity plus jamming detection

Wireless/Carrier Compliance

PTCRB
FCC/IC
AT&T LTE with fallback to HSPA+
Generic LTE with fallback to HSPA+
Verizon LTE

Antenna Connector

One front panel SMA-A main antenna connection
One front panel SMA-A GPS antenna connection
One front panel SMA-A Diversity antenna connection.

DA Dual Ethernet

Power Requirements

Power is supplied by the DA host controller.
Max Power: 2.1 W

Interfaces

Two 10/100 BaseTX RJ-45 Ports, auto MDI/ MDI-X.
Individual isolation from Ethernet network to controller: 1500 Vrms

DA Serial Port

Power Requirements

Power is supplied by the DA host controller.
Max Power: 1.5 W

Interfaces

Individually isolated RS232, RS485/RS422
RS232 ports accessed via an RJ12 jack
RS485/RS422 ports accessed via an RJ45 jack

DA USB

Power Requirements

Power is supplied by the DA host controller.
Max Power: 3 W

Interfaces

USB 2.0

Sled Specifications Continued

DA CAN

Power Requirements

Power is supplied by the DA host controller.

Max Power: 1 W

Connections

Removable wire clamp screw terminal block

Communications

CAN Protocol Port: The CAN protocol port has format and baud rates that are software programmable up to 1 M baud and is digitally isolated. 100 Ohm, 1 W termination is provided through a switch. This port may be configured for various CAN protocols.

Isolation from DA CAN Communication ports to DA host controller: 1000 VDC for 1 minute.

DA J1939

Power Requirements

Power is supplied by the DA host controller.

Max Power: 1 W

Connections

Removable wire clamp screw terminal block

Communications

J1939 Protocol Port: The J1939 protocol port has format and baud rates that are software programmable up to 250 K baud and is digitally isolated. 100 Ohm, 1 W termination is provided through a switch. This port may be configured for various J1939 protocols.

Isolation from DA J1939 Communication ports to DA host controller: 1000 VDC for 1 minute.

DA Wi-Fi

Power Requirements

Power is supplied by the DA host controller.

Max Power: 2.1 W

Power Output

Wi-Fi: 20.5 dBm

Interfaces

Wi-Fi: One RP-SMA Connector

Wi-Fi Compliance

TCP/IP; 802.11 b/g/n Wi-Fi MAC protocol

Frequency Specifications

TECHNOLOGY	CHANNELS	FREQUENCIES
Wi-Fi	1-13	2412 - 2472 MHz

Note: Channel/frequency limitation is enforced based on configured country/region code.

