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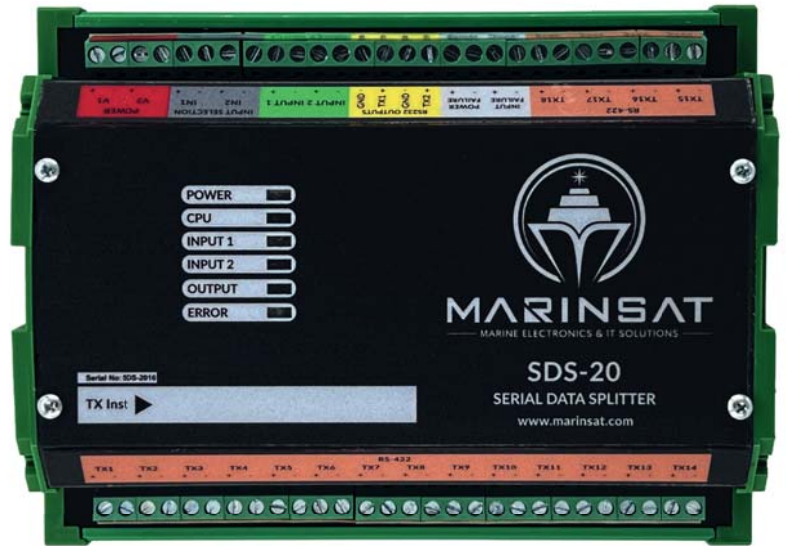


# SDS-20 Serial Data Splitter Brochure & Manual

# Safest & Easiest to Install: SDS-20 Serial Data Splitter

SDS-20 is an advanced NMEA buffer/splitter featuring two inputs and twenty outputs. It is designed to solve the problem of sharing NMEA data from one NMEA device with multiple other NMEA devices in a trouble-free manner.

The received NMEA signal is amplified to the proper NMEA levels, ensuring delivery of an NMEA signal to connected devices which meets or exceeds the specifications of the NMEA standard.



Fully isolated inputs and outputs eliminate all ground loops. The outputs are short circuit proof, ensuring delivery of NMEA data to all connected devices in a reliable manner, independent of short circuits on one or more outputs.

## Main Features

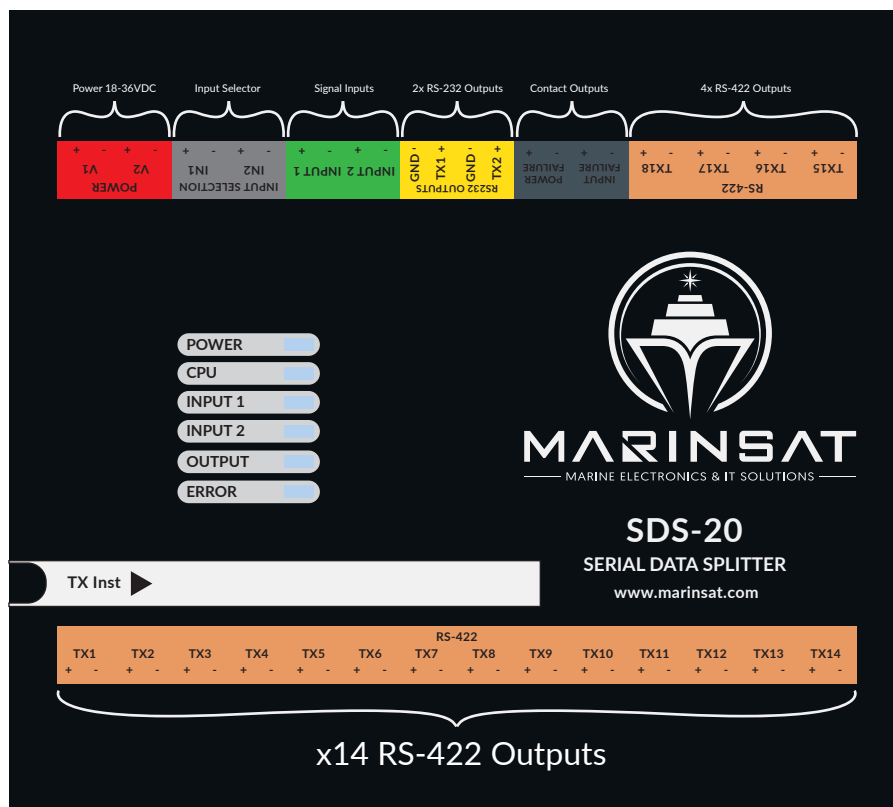
- 2 separate inputs and 20 outputs
- Dual power input with auto-switch function
- Short circuit protection on all outputs
- Galvanic isolation for power supply and inputs
- DIN-rail mounting



# SDS-20 Serial Data Splitter

## Technical Specifications

Main Power Supply	18-36 VDC 2W
Secondary Power Supply	18-36 VDC 2W
Input A	1-20V, 0.5mA min. max. 600-115200 baud, RS 422
Outputs	x18 RS-422, 50mA max. x2 RS-232, 50mA max. for current loop input 100Ω parallel
Applications	Distribution and decoupling of signal sources (e.g. GPS) to several different receivers (e.g. radar, ECDIS, VDR, GMDSS)
Dimensions	L - 167mm, W - 127mm, H - 49mm
Weight	390 grams



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## Technical Manual

### LED Indicators

POWER	- Lights up steadily when SDS-20 is powered up properly.
CPU	- Blinks if SDS-20 is working properly without any problem.
INPUT 1	- Indicates connected active input.
INPUT 2	- Indicates connected active input.
OUTPUT	- Blinks if data is received and processed properly.
ERROR	- Lights up when data is not received from neither of the inputs.



Input A and B are separated and input A is prioritized over input B. If there is data on both input A and B, input A is used. Input B is used only if input A is out.

### Power Failure Relay

SDS-20 features a power failure relay. Contact output can be set as N/O or N/C from the jumper located on board.

### Data Input Failure Relay

SDS-20 features a data input failure relay. Contact output can be set as N/O or N/C from the jumper located on board. This contact output becomes active when there is no signal from both of the inputs.

### Isolation

SDS-20 offers three barriers against ground loops. The first barrier is on the isolated input, the second barrier is on each of the isolated outputs and the third barrier is on each of the isolated DC/DC converters used to power each output.



A major benefit of completely isolated outputs is that a short circuit on one output has no influence on the signal of the other outputs. Signal delivery to connected devices is therefore guaranteed to the highest possible level.



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