



# Product Datasheet

## iQ-S4 OA KAR Modem



**iQ Radio** has built a modular telemetry platform. Manufactured to compliment your application. Based on past experience as well as future requirements we listen to customer requirements in various markets to hear and learn about the wishes and demands. With our modular design and flexibility in using your desired interfaces we supply telemetry solutions ranging from UHF to Cellular up to Wi-Fi p, Wi-Fi and Bluetooth.

### **iQ-S4 OA**

The iQ-S4 OA is the next generation solution for data communications in traffic applications. It complies with the requirements of the Dutch KAR\* (Korte Afstand Radio) specification for Public Transportation data communications. It provides a reliable private data communication links to several services.

The basic applications include traffic light priority requests, the display of real-time information on anticipated arrival times at bus stops, vehicle tracking and communication with the central transportation control computer.

The equipment complies with the following international standards: EN 300 113-2 Annex A, EN 301 489-1,-5, EN 60950-1 and FCC CFR47 Part 90.

### **KORTE AFSTAND RADIO (KAR)**

The KAR Specification defines how onboard computers can be used for various data communication applications within public transportation. It focuses mainly on systems and components used for a set of applications developed to enhance the control and flow of public transportation as well as information services to the public.

The applications are based on a combination of up-to-date technologies, including onboard computers, GPS positioning, and short-range wireless communication with radio modems.



# Product Datasheet

## Technical specifications iQ-S4



Frequency	403 ... 473 MHz
Channel Width	12.5 kHz/25 kHz (software selectable)
Tuning Range	70 MHz
Frequency Control	Synthesized 6.25 kHz tuning resolution
Modulation	OA
Carrier Power	0.02, 0.05, 0.1, 0.2, 0.5, 1 W programmable

### DATA MODEM

Interface	RS-232, optional Bluetooth and UDP
Interface connector	DB9, female, RJ45 Female
Data speed of serial interface	1200-115200 bps
Data speed of radio interface	9600, 14400, 19200, 28800 bps
Data format	Asynchronous data
Air interface encryption	AES128 (optional)

### GENERAL

Input Voltage	9-30 Vdc / 1A
Power Consumption	Typical 0.8 W (receive) 4.7 W (transmit 1W)
Temperature Range	-25 °C ... +55 °C
Antenna connector	TNC, 50 ohm, female
Construction	Diecast aluminium alloy
Size HxWxD	mm 115 x 64 x 31 mm
Weight	250 g

Manufacturer:



Satel Benelux BV  
Margadantstraat 36,  
1976 DN IJmuiden  
The Netherlands

Phone +31 (0)255 820 009  
E-mail [info@satelbv.nl](mailto:info@satelbv.nl)  
[www.satelbv.nl](http://www.satelbv.nl)