



Securing the Internet-of-Your-Things

The AKUA IVM is an innovative, cost effective, in-dash command center that uses GPS and GPRS to monitor and safeguard shipments. It provides any remote user with long-distance data on a shipment's whereabouts and condition at all times during transit. It also tracks stops and detours by the driver, as well as any change in status of the shipped material.

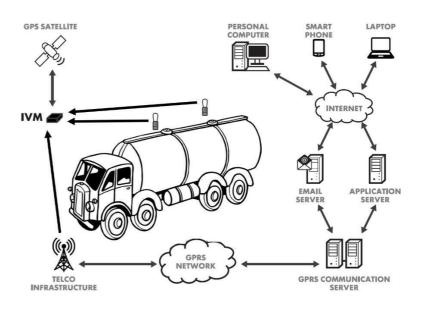
The tamper-proof AKUA IVM works with a range of other AKUA products including the SLA, SLA, and volume sensor. These can be attached to the locking mechanism of a tank, trailer or shipping container, to the shipment itself, or inside of the conveyance. The master components monitor the slaves and periodically report their status (data, location, and time stamps) to designated servers via cellular signals and Internet connections.

Key Features:

- •Complete safety and security of shipped materials
- Constant monitoring of shipments in transit
- •Consistent monitoring of driver activity during transit and cabin conversations
- Prevents shipment theft and tampering
- •Flexible under-dash mounting
- Multiple electrical conduits monitor up to 12 separate inputs, output, and buttons
- •Can monitor up to 25 slave devices
- Supports driver panic button
- •FCC and CE certified
- •IP54 rated
- •Easy to configure, maintain and use
- Tamper proof housing
- Provide worldwide GPS/GPRS signaling
- •Can remotely disable vehicle
- •Compatible with standard vehicle voltages

How IVM monitors and Tracks your Shipments

The AKUA IVM mounts in the cab of the vehicle and receives data from the SLx devices mounted on the fill and outlet ports and from the volume sensors mounted on the tank. The location of the transport is monitored via GPS. Data from the SLx and volume sensor devices are transmitted via the IVM through GPRS network to the GPRS servers, and then via the mail/application servers to the end user's laptop, phone, or PC.



The AKUA IVM is available in four configurations

Product	Description	Part Number
IVM	Internal antenna without voice communication	008-0502-0002
IVM-v	Internal antenna with two-way voice communication 008-0502-0002	
IVM-e	External antenna without voice communication 008-0502-0002	
IVM-ev	External antenna with two-way voice communication	008-0502-0002

AKUA IVM Specifications

Model Numbers	IVM-024B	Radio frequency in Vehicle Master
Physical	LxWxD	131mm x 70mm x 25mm
	Weight per set	250g
Environmental	Temperature	-30C to 70C
	Humidity	95% noncondensing
	Weatherproofing	IP54
Wireless	Frequency	ISM 2.4GHz QFSK modulation
	Active Transmission Power	<18dBm (~100mW)
	Range	200m L.O.S
	Protocol	Proprietary
	Air Data Rate	250kbps
GSM/GPRS	Bands	GSM/GPRS/EDGE Quad Band
	SIM	Dual-SIM slots (primary and secondary)
GPS	Channel	SiRF Star III 20 CH
	Antenna	Active antenna with 2.5m cable
Electrical	Input Voltage	8v to 30v
	Backup Battery	Rechargeable 3.6v, 1.5 AH Lithium polymer
	Active Current Drain	240mA
	Inactive Current Drain	10mA
RD Data	Packet Data	32 bytes/FIF0
Interface	Audio/Voice	Optional
	Digital Input/Output	8
	Analog Input/Output	2
	Serial	1

