

iFleetONE™

A maritime communications system for small and mid-sized fishing and leisure vessels

NOW VMS APPROVED



The Wideye™ iFleetONE™ is one of Addvalue's maritime communications system operating on the Inmarsat global Alphasat and I-4 satellite network. Designed to be compact for small and mid-sized fishing and leisure vessels, it delivers affordable, tailored broadband voice and data services.

While at sea, the Wideye™ iFleetONE™ will be your indispensable partner for all of your business or leisure communications needs - it makes it easy to talk, text, and send and receive emails. It offers one voice line and data up to 150kbps - ideal for accessing full-colour weather images, navigational charts and routing information, as well as sending reports and browsing the web.

With Inmarsat's free 505 Emergency and calling service included, Wideye™ iFleetONE™ helps to keep sailors safe. Additionally, it offers many rich value-added features including:

- Built-in Firewall
- Built-in Wi-Fi for wireless mobility and smartphone applications accessibility
- Standard IP Data with one user accessible Primary PDP Context
- Built-in Web Console (English and Simplified Chinese languages)
- Remote Access for diagnostics, configuration and management
- SIM Lock based on IMSI/APN
- Data Connection ON / OFF Control via external remote switch
- Volume limited access for data sessions
- Radio Silence (radio transmission on/off) Control via external remote switch
- Configurable Restricted dialling - to prevent unauthorised outgoing calls
- Configurable Forced dialling - with SAC configuration - to enable crew calling
- Built-in SIP server supporting third party VoIP devices / applications
- Automatic and on-demand position reporting and fleet tracking capability including geo-fencing, with up to 10 polygon areas configurable

With a compact antenna and an easy to install below deck unit (BDU), the Wideye™ iFleetONE™ is small but powerful, with special features such as:

- Mechanically stabilised antenna- (including ATC-Resilience, Extended L-band and IP56 protection capability)
- Primary handset (optional) : IP66 environmental protection
- NMEA 0183 continuous GPS output
- No Fuse - Utilises an intelligent circuit breaker protection
- Appends GPS position to SMS

The Wideye™ iFleetONE™ includes a Primary Handset (optional) with a large colour LCD display and mobile phone type keys for text messaging. The BDU with its additional RJ11 phone port can connect either a standard corded or cordless phone.

For internet service, you can simply connect the Wideye™ iFleetONE™ to an on-board computer network using the standard RJ45 Ethernet connection. With NAT and DHCP functions, Wideye™ iFleetONE™ offers both single user (modem) and multi-user router modes. Utilising MAC address filtering and firewall features, it offers unmatched access security and uses secure IP-based technology which greatly enhances the privacy of your voice and data communications.

The internal GPS receiver and GPS Output in NMEA 0183 format of the Wideye™ iFleetONE™ can also be used to provide accurate position information to onboard systems such as plotters and depth sounders.

Charges are made for the kilobytes of data send and received, not the time used. Flexible, seasonal air-time pricing and preferential pricing regions makes the Wideye™ iFleetONE™ affordable for smaller vessels.

Addvalue Vessel Monitoring System (VMS)

Addvalue VMS is a vessel tracking solution to meet the respective country's Fisheries Authority's mandatory regulatory requirements to address Illegal Unreported and Unregulated (IUU) fishing. It has obtained Type-Approvals from National Oceanic and Atmospheric Administration (NOAA Fisheries USA), Pacific Island Forum Fisheries Agency (FFA) and Western and Central Pacific Fisheries Commission (WCPFC).

The VMS solution offered with iFleetONE™ terminal is a 2-in-1 solution, with a built-in VMS engine which reports both automatic and on-demand location updates of the vessel to the respective authorities, is also used as a general purpose broadband communication terminal for general purpose data and voice communications of the crew.



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Technical Specifications

Compliant to RED, IEC60945, RoHS
Certification Mark : FCC, CE, IC
Wi-Fi Compliant IEEE802.11 b/g/n
Green Passport

Frequency Band

Transmit: 1625.5 ~ 1660.5 and 1668.0 ~ 1675.0 MHz
Receive: 1518.0 ~ 1559.0 MHz

Recommended Antenna Cable

Cable loss :10dB (max) at 1.6GHz and 1.0 Ω (max) DC loop resistance

Power Supply

DC input range (isolated) : +10.8V to +31.2V DC
Power (min) : 100W

Environmental Conditions

Operating Temperature : -25 to +55°C
Storage Temperature : -40 to +80°C
Operating Humidity : 95% non-condensing at +40°C
ADU Ingress Rating : IP56
BDU Ingress Rating : IP31

Vibration (ADU)

Vibration (Operational) : Random spectrum 1.05g rms x 3 axes:
5 to 20 Hz: 0.02 g²/Hz
20 to 150 Hz: -3 dB/octave
Vibration (Survival) : Random spectrum 1.7g rms 2 h x 3 axes
(6 h in total)
5 to 20 Hz: 0.05 g²/Hz
20 to 150 Hz: -3 dB/octave

Mechanical Shock

: 20g, 11ms half-sine wave

Ship Motion

Roll : ±30° / 4s period, max 0.7g tan.
Pitch : ±15° / 3s period, max 0.6g tan.
Yaw : ±10° / 5s period, max 0.3g tan.
Turning Rate : ±36°/s, acc. max 12°/s²
Surge : ±0.5g
Sway : ±0.5g
Heave : ±0.7g
Headway speed : 42 knots
Wind : 100 knots

Services

Standard Voice : 4 kbps circuit switched (AMBE+2 codec)
Standard IP : Up to 150 kbps
SMS : Up to 160 characters (3G standard)
Larger SMS content : supported as multipart or segmented SMS (> 160 characters)

Router Functions

Single User Router Mode : NAT disabled, with option to enable/disable DHCP
(Modem Mode)
Multi-User Router Mode : NAT enabled, with option to enable/disable DHCP

Interfaces

ADU
Antenna Connector : 50Ω N-Type, Female
BDU
Antenna Connector : 50Ω N-Type, Female
Wi-Fi Connector : 50Ω SMA, Male
SIM Card Slot : 1 SIM Card Slot for Fleet One SIM card
Ethernet : 1 RJ45 LAN Port
Standard Phone : 1 RJ11 Phone Port
Status LED : 4 LEDs (Terminal, Antenna, Registered, Data Active)
I/O Connector : for Remote ON/OFF Switch, Data connection ON/OFF Switch, Radio Silence ON/OFF Switch and External Ringer
Serial Port : for GPS Output (NMEA 0183)
DC Power Input Socket
Primary Handset Connector
Resettable Circuit Breaker
Safe Mode Switch

Physical Data

Dimension : BDU : 330 x 256.7 x 66.5 mm
ADU : 278 (Dia.) x 228 mm
Weight : BDU : 2.7 Kg / 6.0 lbs
ADU : 2.8 Kg / 6.2 lbs

Primary Handset

Display : 2 In, 220 x 176 pixel TFT, 65K Colour LCD
Dimension : 142 x 156 x 22 mm
Weight : 390g / 0.8 lbs
Ingress Rating : IP66
Operating Temperature : -20 to +55°C
Storage Temperature : -30 to +70°C