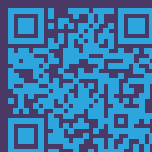


**FMT-MAT-V1**  
**Marine Asset Tracker**



Scan to browse

Update: 17-Oct-2018



# Index

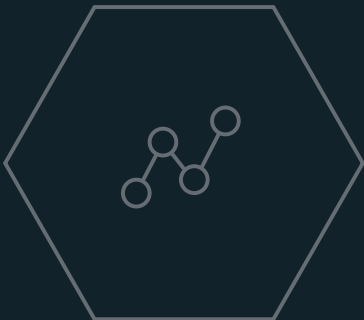
	<i>Page</i>
1 About Company	3
2 Hardware Specification	4
3 FMT Architecture	5
4 Overview	6
5 Key Benefits	6
6 Technology	7
7 Satellite Coverage	7
8 Track by Distance	8
9 V-Mail	10
10 FMT Control Panel	12
11 Automatic Position Report	14

# About Company



*Falcon Mega Solutions (FMS) is a leading service provider, and offers a state-of-the-art Tracking, Monitoring, and Security Solutions to Offshore, Marine and Fishing Industry.*

*We have a strong commitment for the continuous Research & Development and Improvement of our Solutions and Services. We aim to be the dominant Service Provider in the Maritime Security, Asset Monitoring, Tracking and Surveillance worldwide.*



*Our mission is to provide reliable and efficient technology to assist in making the Safe & Secure Sea for the vessels and their crew.*

# Hardware Specification

## Satellite Communication

**Make:** Orbcomm

**Satellite:** Inmarsat, Two-way, ISatData  
Pro Satellite Service, Global Coverage

## Certification

**Type Approval:** Germanischer Lloyd, Inmarsat, IP67

**Regulatory:** CE (R&TTE, RoHS 2), FCC, IC, Anatel, MSS Russia, SRRC, RCM Mark, IEC 60945, C1D2

## Electrical

**Input Voltage:** 12 to 30V DC

**Power:** Rx: 45mA, with GPS: 60mA  
Tx: 0.75A  
Sleep: 100 micro A

## GPS / Glonass

**Elevation Angle:** -15 to +90 Deg

**Acquisition time:** Hot: 1 second;  
Cold: 29/30 seconds

**Accuracy:** 2.5m/4.0m CEP-Horizontal

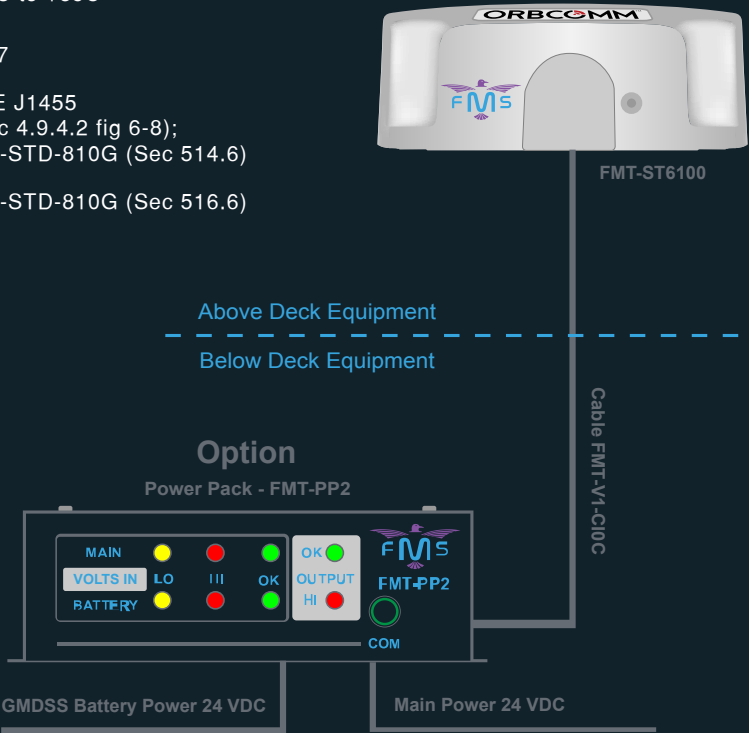
## Environmental

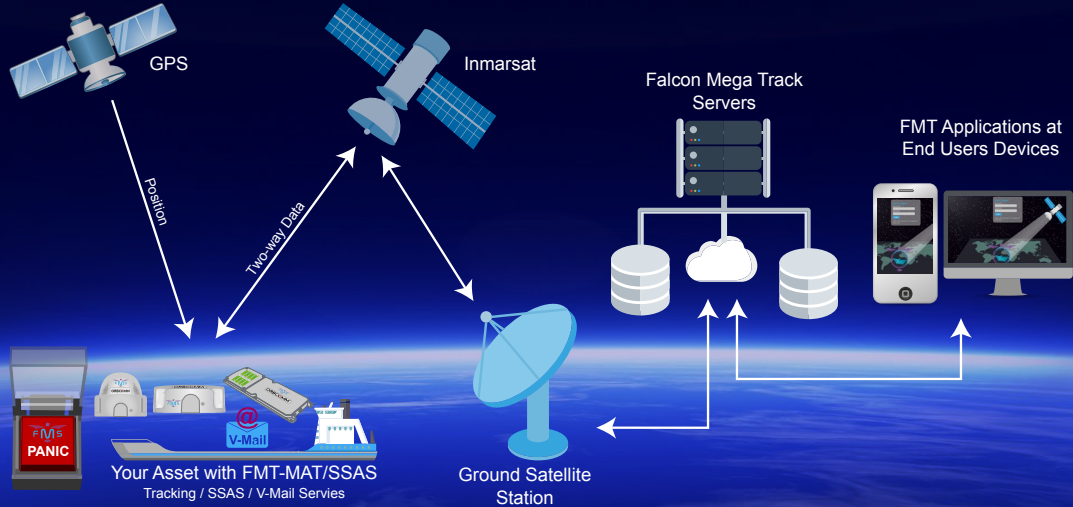
**Operating Temp:** -40C to +85C

**Dust/Water Ingress:** IP67

**Vibration:** SAE J1455  
(Sec 4.9.4.2 fig 6-8);  
MIL-STD-810G (Sec 514.6)

**Shock:** MIL-STD-810G (Sec 516.6)





01

*ULTIMATE Choice for Marine Asset Tracking*

02

*Prepaid Billing, No Hidden Cost*

03

*Track by Distance™ App. for Low Operational Cost*

04

*Type Approved Hardware*

05

*Email Support by Inmarsat Satellite Powered by V-Mail*



# Overview

FMT-MAT-V1 is a Satellite ISatData Pro Terminal, programmed with Marine Asset Tracking, enables companies to track and monitor their vessels and boats, giving them increased visibility of business operations, enhanced efficiency, and greater safety and security for their vessels and boats, while lowering operational costs.

Secure HTTP encryption and password-protected identification ensure that sensitive data remains safe.

## Key Benefits

1. Inmarsat Type Approve, CE Mark, FCC, RoHS, Anatel; Perfect for harsh marine environment;
2. Global Coverage of Inmarsat;
3. Quick Activation;
4. User Friendly Control Panel;
5. Prepaid Airtime System - FMT Units
6. Airtime usage report;
7. Distance and Bearing from 5 nearest Ports;
8. Two Years Tracking History;
9. Astronomical Calculations e.g. Sun Rise, Sun Set, Dawn, Solar Noon, Dusk, Day Light Period, Night Period;
10. Global Weather and Forecasting;
11. All standard tracking feature available;

## Applications



# Technology

1. ISatData Pro Satellite Terminals, by Orbcomm, one of the leading company in the world for the development of M2M Satellite Terminal of Maritime Industry. IDP terminals are highly reliable and high efficient;
2. Robust hardware to stand with harsh marine Environment;
3. Highly Reliable Servers, 99.99% up time, running 24/7 with FMT Control Panel, the core application is the back bone of SSAS & Tracking system;
4. Secure Web Access to FMT Control Panel through HTTPS, powered by Professional SSL Certificates;
5. 24/7 Technical Support;
6. Continuous development and Improvement;
7. Prepaid Billing System, with 2 years billing and usage history online;
8. V-Mail Software specifically designed for IDP terminals, and with additional support of FleetBroadband and Terrestrial or Satellite Internet, to enhance Routine and Emergency Communication.

## Satellite Coverage



# Track by Distance™

Track by Distance™ (TBD), developed by FMS, is an Application for Orbcomm IDP Terminal to economize the use of prepaid Airtime Units for the benefit of the customers of FMS. In addition to Time based Automatic Position Reports (APR), TBD Application enables IDP Terminals to send the APRs at set distance travelled, and that is really a true tracking of a vessel.

For Example, a Vessel is set on 2 APR per day, and 20 mile distance, the vessel will just send 2 APR/day while she is not moving, i.e. in port or at anchorage; and automatically starts APRs every 20 miles while she is moving, i.e. making way for the voyage.

**Position Report Interval**

Selected Asset:

LA Bonite B

Position Every (Min):

1440 Min(s), (24h-0): 1 Postions per day

Position By Distance:

20

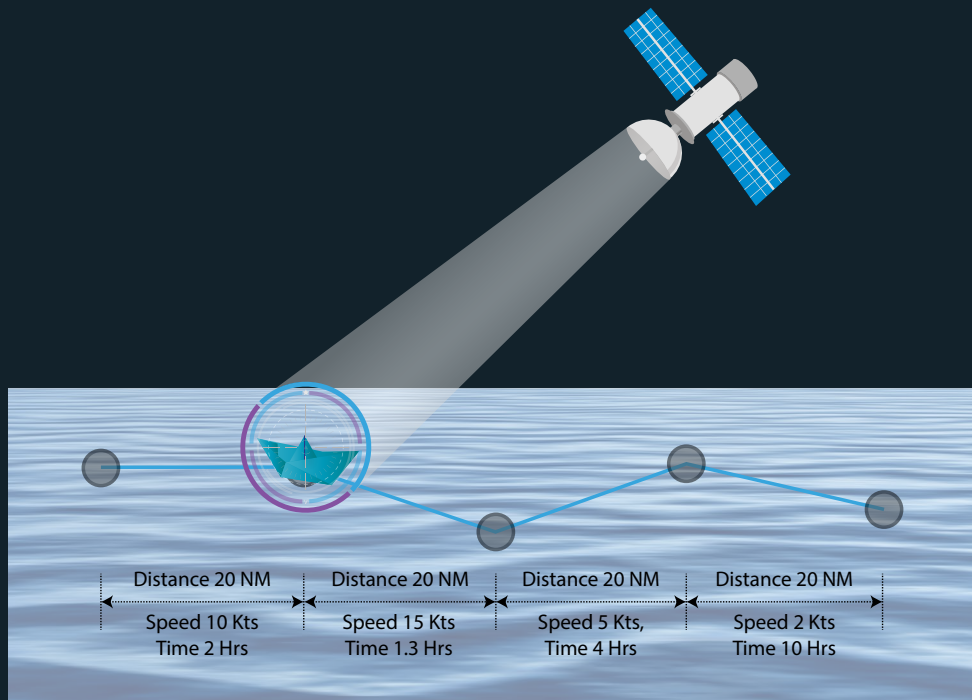
Nautical Mile(s)

Last changed by system on 28-Oct-2013 09:59 (UTC)

Update

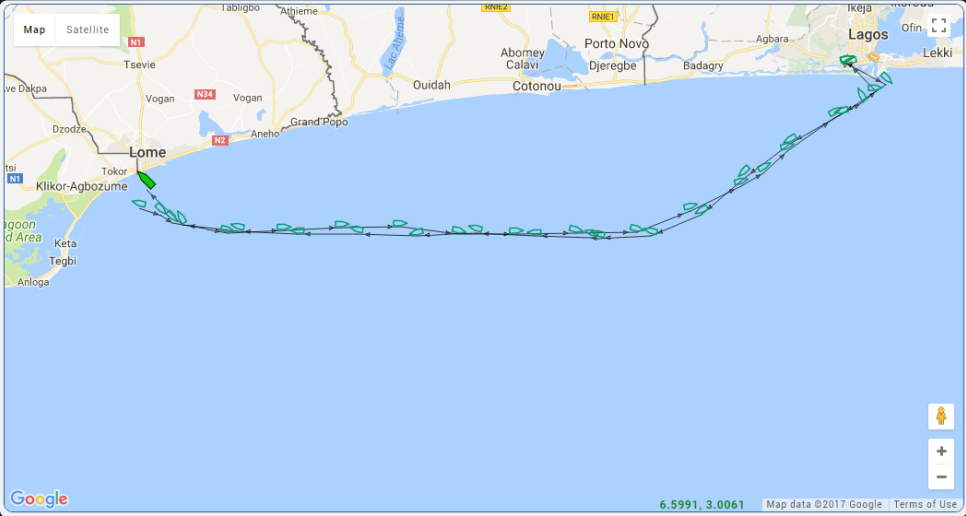
Close

This feature not only helps avoiding unnecessary APRs for CSO's time saving, but also saves the Airtime Units while vessel is not moving, and ALERTS the CSO / managers of the vessels against unauthorised movement of the vessel.

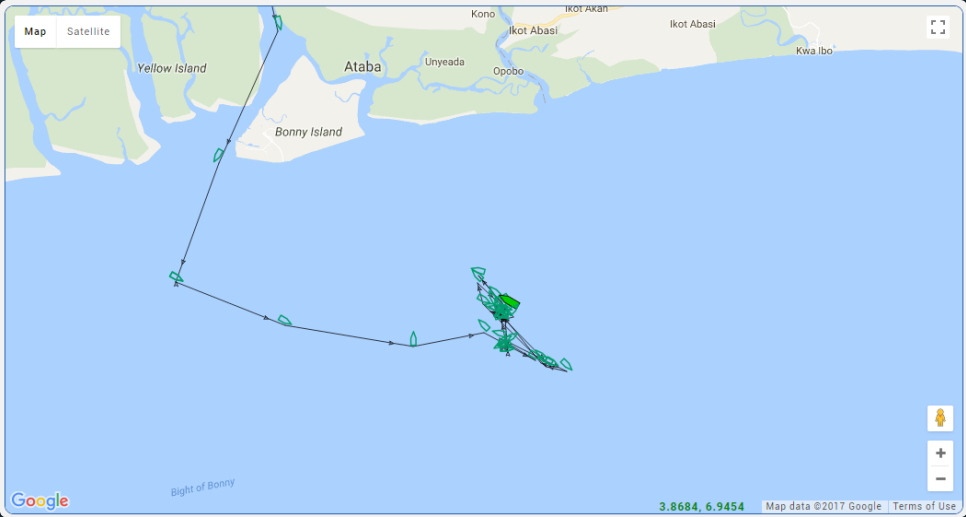




Track by Distance ON



Track by Distance OFF





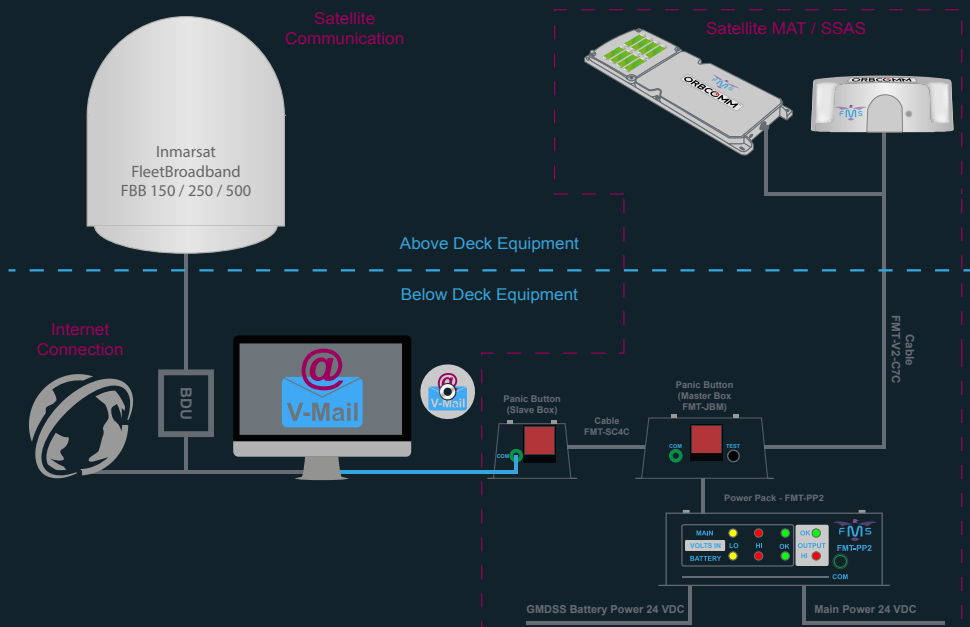
## V-Mail

V-Mail Client is an email client that allows the vessels to send and receive short email messages through various FMT-SSAS/MAT terminals, and full functionality through Inmarsat FleetBroadband or any other INTERNET connection available. Vessel may use one or both connectives simultaneously.

### *Benefits of V-Mail*

1. User Friendly; Low Cost Satellite Email Solution;
2. Two Connection, Two Email addresses but one email client; Ability to use two email address simultaneously, one for FMT IDP Terminals (Email Messaging only, without file attachment) and one for FBB/Internet emails (with file attachment support);
3. Much simple and user friendly as compared to major marine email clients e.g. Amosconnect, SkyFiles, GT Mail Plus etc.
4. Lowest License fee;
5. Full Functional Free Trial is available for customer satisfaction before purchasing of License;
6. Free License to use with FMT Terminals; e.g. FMT-SSAS-V1, FMT-SSAS-V2, FMT-MAT-V1, FMT-MAT-V2;
7. High cost saving on FBB airtime bills;
8. Perfect solution with use of FMT Email Servers and V-Mail Client to control over the data usage and SPAM filtering;

9. Capability to Send and Receive emails through Inmarsat FleetBroadband (FBB) and any other Internet Connection available onboard, in addition to FMT IDP (SkyWave/Orbcomm) Terminals;
10. 24/7 Connectivity through FMT IDP terminals without any stand-by cost of airtime;
11. 27/7 Connectivity, manual connection or on demand connection for FBB/Internet;
12. Full control by Vessel Management through FMT Control Panel at [www.falconmegatrack.com](http://www.falconmegatrack.com) control email text size, attachment size, black list and white list email recipients,
13. Remote Communication Monitoring by Vessel Management; functionality of auto CC and auto BCC to particular email address for communication control and backup purpose;
14. Future Plan for Android V-Mail Client for Mobile Phone and Tablets via Wi-Fi Connection, to eliminate the use of PC; useful for small boats where computer is not available wheel house;



# FMT Control Panel

FMT Control Panel provides versatile features to control over the entire Fleet of the Company, with secure web access at <https://www.falconmegatrack.com>

## FMT Control Panel Features



Asset Details



Customer Account Details



Notification Setting



Change Password



Set Position Report Interval



V-Mail



Poll Position Report



V-Mail Message Settings



Ship Security Alert System



V-Mail Message Filters



Place Markers



Assets NOT Reporting



Maps



SSAS Test (Warning)

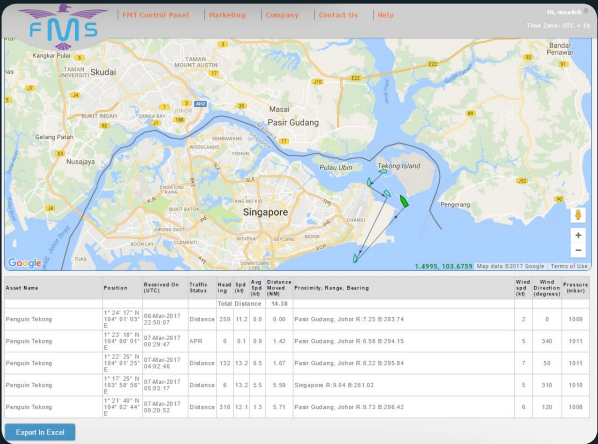
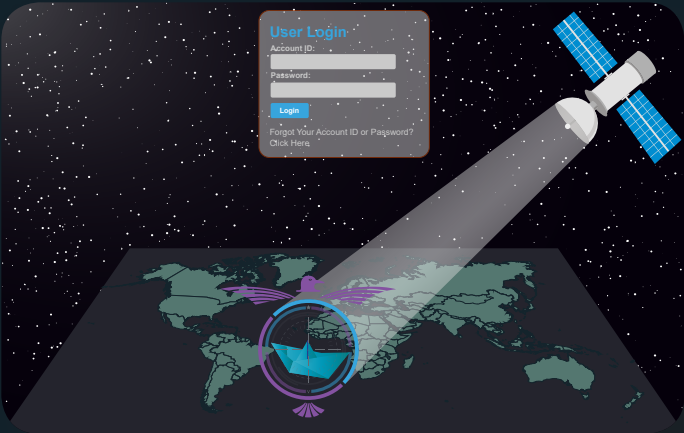


Register Vessel



Customer Billing (Airtime)  
Detail

# Online Map & History



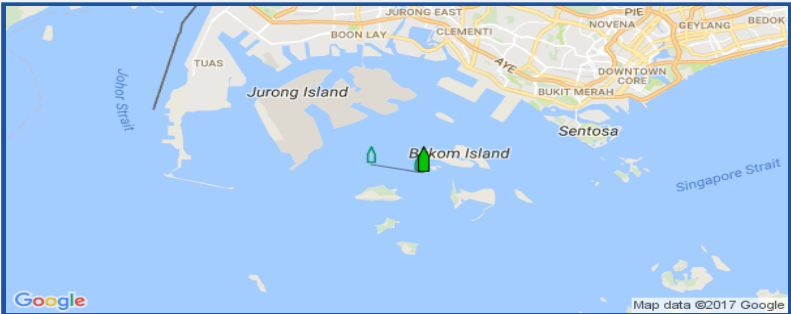
# Sample Position Report

## Position Report [ Sample Vessel ]

Sender: Tracking-NoReply  
Received: sample@yourdomain.com  
Date: 26-Sep-17 01:29:28



## Position Report [ Time ]



Map history from 19-Feb-2016 06:29:46 to 26-Sep-2017 00:28:28 (UTC)

Asset Detail

Help

Asset Name:	Sample Vessel
Mobile ID:	01039997SKY1234
Transceiver:	FMT_MAT_V1
IMO:	1234567
MMSI:	123456789
Call Sign:	AV1234
Received On:	26-Sep-2017 00:28:28 (UTC)
Position:	Lat: 1° 13' 19" N, Long: 103° 44' 36" E
Heading:	0 degrees
Speed:	0 knots
Average Speed:	0.0 knots
Distance Moved:	0.1 NM from last position (1° 13' 19" N, 103° 44' 29" E) in 14015h-59m.


Proximities

Help

Proximity:	Singapore; Range: 06.0 NM Bearing: 063.6 Degree				
------------	---	--	--	--	--

Well Known Nearest Sea Ports

#	Country	Port	Lat	Long	Range (NM)	Bearing
1.	Singapore	Singapore	01.27	103.83	06.0	63.6
2.	Malaysia	Tanjung Pelepas, Johor	01.35	103.53	14.7	301.4
3.	Malaysia	Pasir Gudang, Johor	01.43	103.90	15.7	36.5
4.	Malaysia	Port Dickson	02.52	101.78	140.6	303.5
5.	Malaysia	Kuantan (Tanjong Gelang)	03.97	103.43	164.6	353.6

Astronomical Calculations			Help
Description	UTC (start-end)	Calculated Time Zone Offset +8	
Dawn:	22:33	06:33	
Sunrise:	22:54 - 22:56	06:54 - 06:56	
Solar Noon:	04:57	12:57	
Sunset:	10:58 - 11:00	18:58 - 19:00	
Dusk:	11:21	19:21	
Day Light:	22:56 - 11:00	06:56 - 19:00	
Night:	11:45 - 22:09	19:45 - 06:09	
Weather			Help
Temperature:	82.2 F (27.9 C)		
Wind:	Calm		
Wind Direction:	254 degrees		
Pressure:	1010 mbar		
Visibility:	6.2 miles		
Weather:	 Mostly Cloudy		

Regards,

Customer Support: [support@falconegasolutions.com](mailto:support@falconegasolutions.com)

Phone: +92 49 2723682 [ 09:00 ~ 18:00 (UTC+5) ]

Emergency Contact 24/7: +92-322 4163545

web: [www.falconmegatrack.com](http://www.falconmegatrack.com)

skype: [falconegasolutions](#)

twitter: [falconegasols](#)

© Copyright Falcon Mega Solutions



# Falcon Mega Solutions

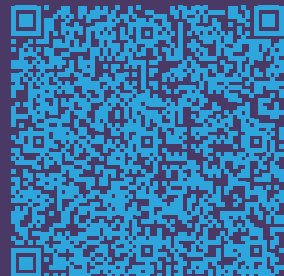
[www.falconmegasolutions.com](http://www.falconmegasolutions.com)

## *Sales Team*

[sales@falconmegasolutions.com](mailto:sales@falconmegasolutions.com)

+92 49 2723682 / +92 322 4163545

[ 08:00 ~ 17:00 (UTC+5) ]



Scan this Code to Save Business Card