

M-JET®

HAZARD MONITORING SYSTEM



components for your success



► English

M-JET®

INTRODUCTION



The M-JET is a multi-function hazard monitor compatible with various material handling equipment such as bucket elevators, conveyor systems and screw conveyors.

The M-JET analyzes data sent by sensors installed on the equipment and provides a safe and controlled shutdown, via output relays, in the event of equipment malfunction or operation beyond user programmed limits.

M-JET MONITORS EQUIPMENT FOR THE FOLLOWING HAZARDS:

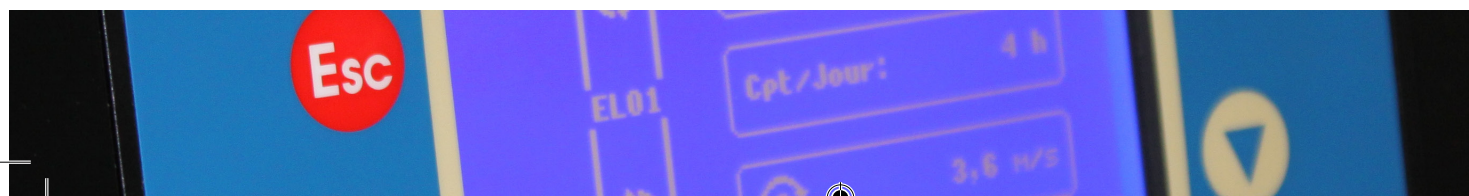
- Under speed due to belt slippage on the pulley
- Bearing and motor temperature
- Belt misalignment with contact or non-contact sensors
- Choke level on the conveyor input and output

M-JET 1: For equipment in NON-ATEX/Hazardous Location ZONES

M-JET 2: For equipment ATEX/Hazardous Location ZONES

M-JET 2 is certified to the following standards:






- **EN 50495** Safety devices in ATEX Zone
- **SIL2 - EN 61508** Functional safety
- **EN 61326-1 CEM** Electromagnetic compatibility
- **EN 61010-1** Electrical equipment safety



M-JET®

PRODUCT GUIDE



	ITEM	MODEL		
p.4	M-JET®		Specifications	
p.5	55MJ9001	M-JET 1 HZ ATEX	Conveyor in a non Atex zone	 M-JET® 1
	55MJ9002	M-JET 2 ATEX ZONE	Conveyor in an Atex zone	 ATEX M-JET® 2
p.6	55MJ9001NT	M-JET 1 NT HZ ATEX	Conveyor in a non Atex zone with network connection (RJ45)	 ETHERNET M-JET® NT 1
	55MJ9002NT	M-JET 2 NT ATEX ZONE	Conveyor in an Atex zone, with network connection (RJ45)	 ATEX ETHERNET M-JET® NT 2
p.7	55UT9001	M-JET.COM	Connected system: Cloud, email, SMS	 @ M-JET®.COM



M-JET®

SPECIFICATIONS

HOUSING:

ENCLOSURE WITH LARGE SCREEN AND USER KEYS

- Languages: French, English, Spanish, German, Italian and Chinese

DISPLAY: THE CONVEYOR IMAGE TYPE IS SHOWN ON THE LCD. CONVEYOR TYPES AVAILABLE ARE:

TYPES OF CONVEYORS :

- Bucket elevator
- Chain conveyor
- Belt conveyor
- Screw conveyor

HOME SCREEN DISPLAY DATA WHEN CONVEYOR IS RUNNING:

- Warning or Alarm, if present
- Conveyor speed
- Run status
- Run time by day/accumulated

SPEED SETTING DISPLAY DATA:

- Under speed sensor status
- Conveyor speed
- Run status
- Run time by day/accumulated

CONFIGURATION:

THERE ARE TWO WAYS TO CONFIGURE THE DEVICE

- **Manual** : With the keyboard on the front panel
- **USB**: Configuration can be imported with an USB key already loaded with the settings of another device

ALARM MANAGEMENT:

- On-screen display of Warning or Alarm
- Drive a sound alarm or light
- Stop the conveyor

DATA LOGGING :

THE M-JET RECORDS THE FOLLOWING DATA:

- **Alarm and Warning history**: M-JET can save 300 warnings or alarms
- **Configuration modification history**:
Saves the last 365 configuration modifications" and move to the end of the pervious line
- **Equipment run-time history**:
M-JET saves conveyor run time during the last 365 days of use
M-JET records temperature readings during the last 365 days of use

HISTORICAL DATA ANALYSIS:

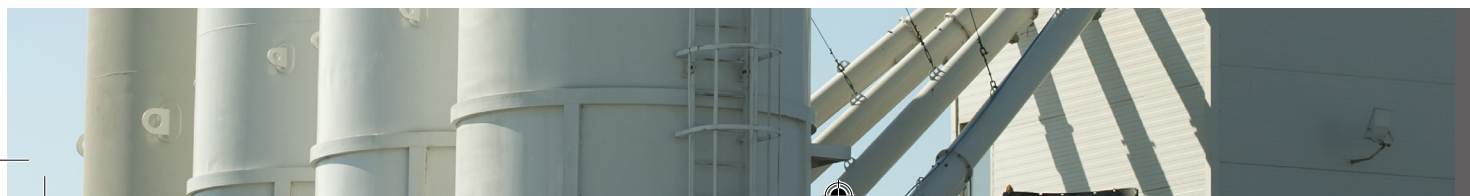
ARCHIVED DATA CAN BE VIEWED ON THE M-JET SCREEN OR DOWNLOADED TO A USB KEY IN CSV FORMAT.

MAXIMUM SENSOR CONFIGURATION:

- 2 belt speed sensors
- 5 bearing temperature sensors
- 8 belt alignment sensors
- 2 choke level sensors

STANDARDS:

- **EN 50495** Safety devices for ATEX Zone
- **SIL2 - EN61508** Functional safety
- **EN 61326-1 CEM** Electromagnetic compatibility
- **EN 61010-1** Electrical equipment safety

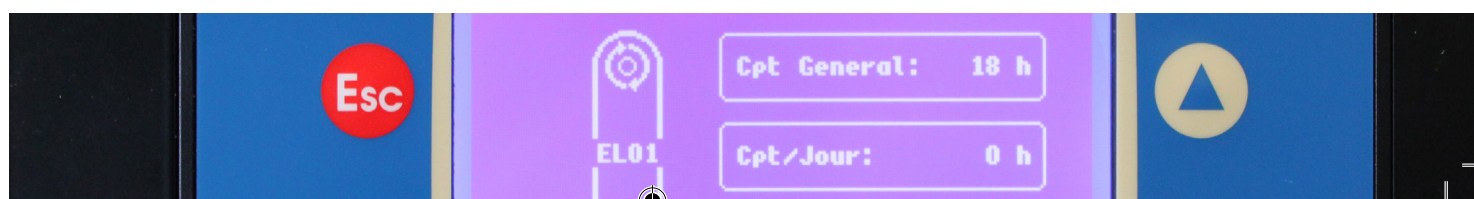
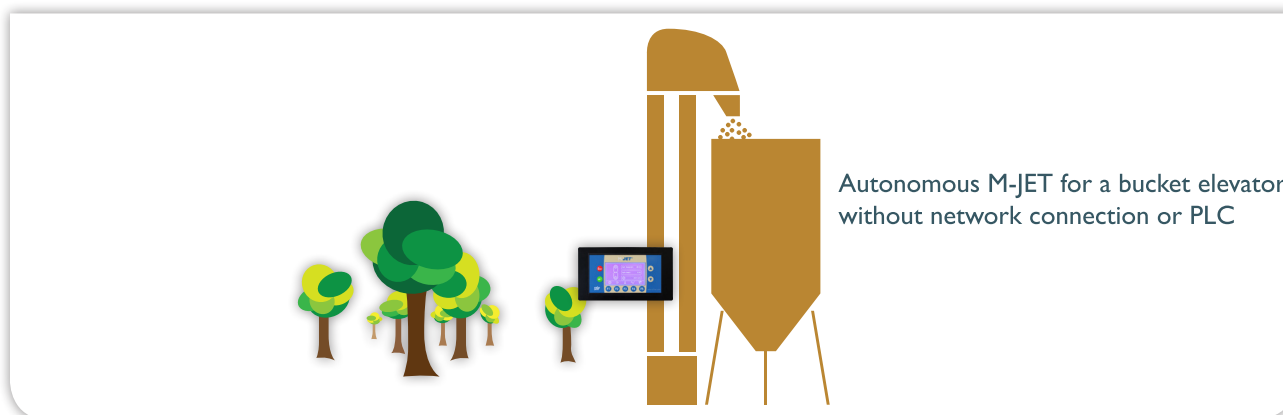


M-JET®

CONTROL UNIT

M-JET 1 FOR CONVEYORS IN A NON ATEX/ HAZARDOUS LOCATION ZONE	M-JET 2 FOR CONVEYORS IN AN ATEX/ HAZARDOUS LOCATION ZONE
IN NON ATEX/HAZARDOUS LOCATION ZONES, ATEX APPROVED SENSORS ARE NOT REQUIRED	IN ATEX/HAZARDOUS LOCATION ZONES, THE USER IS REQUIRED TO CONNECT THE FOLLOWING SENSORS <ul style="list-style-type: none"> • Belt speed: 1 • Bearing temperature: 1 for each bearing • Belt alignment: 2 pairs of single sensors or 1 pair of dual sensors

Input information:	M-JET 1	M-JET 2
Remote motor	✓	✓
Supply voltage:	M-JET 1	M-JET 2
Monitoring: 24VDC isolated	✓	✓
Sensors: 24VDC (Supplied by M-Jet)	✓	✓
Alarm outputs:	M-JET 1	M-JET 2
Engine stop	1	2
Light stack	3	3
Horn	1	1
Choke level	1	1
User settings:	M-JET 1	M-JET 2
Display parameters	✓	✓
Change settings via front panel	✓	✓
Historical timeline visualization	✓	✓
USB programming	✓	✓
Save settings and historical data to USB key	✓	✓
Approvals:	M-JET 1	M-JET 2
EN 61326-1 CEM Electromagnetic compatibility	✓	✓
N 61010-1 Electrical equipment safety	✓	✓
EN 50495 Safety devices for ATEX Zone	✗	✓
SIL2 EN 61508 Functional safety	✗	✓

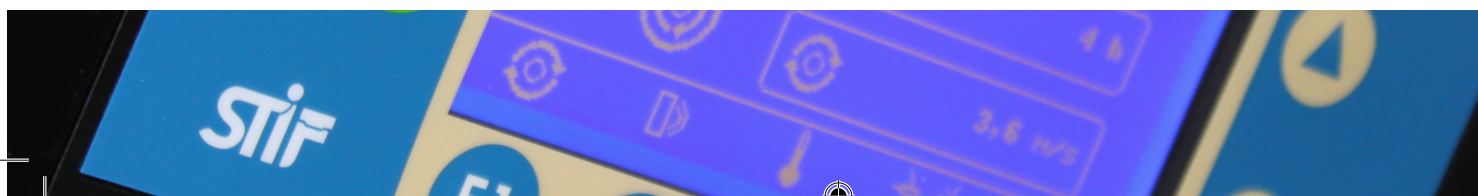


M-JET® NT

M-JET WITH NETWORK CONNECTION (RJ45)

M-JET 1 NT FOR CONVEYORS IN A NON ATEX/ HAZARDOUS LOCATION ZONE	M-JET 2 NT FOR CONVEYORS IN AN ATEX/ HAZARDOUS LOCATION ZONE
IN NON ATEX/HAZARDOUS LOCATION ZONES, ATEX APPROVED SENSORS ARE NOT REQUIRED	IN ATEX/HAZARDOUS LOCATION ZONES, THE USER IS REQUIRED TO CONNECT THE FOLLOWING SENSORS <ul style="list-style-type: none"> • Belt speed: 1 • Bearing temperature: 1 for each bearing • Belt alignment: 2 pairs of single sensors or 1 pair of dual sensors

Input information:	M-JET 1	M-JET 2			
Remote motor	✓	✓			
Supply voltage:	M-JET 1	M-JET 2			
Monitoring: 24 VDC isolated	✓	✓			
Sensors: 24 VDC (Supplied by M-Jet)	✓	✓			
Alarm outputs:	M-JET 1	M-JET 2			
Engine stop	1	2			
Light stack	3	3			
Horn	1	1			
Choke level	1	1			
User settings:	M-JET 1	M-JET 2			
Display parameters	✓	✓			
Change settings via front panel	✓	✓			
Change settings remotely	✓	✗			
Historical timeline visualization	✓	✓			
USB programming	✓	✓			
Save settings and historical data to USB key	✓	✓			
Interface:	M-JET 1	M-JET 2	Approval:	M-JET 1	M-JET 2
LAN Communication	✓	✓	EN 61326-1 CEM Electromagnetic compatibility	✓	✓
Operation display	✓	✓	N 61010-1 Electrical equipment safety	✓	✓
Display settings	✓	✓	EN 50495 Safety devices for ATEX Zone	✗	✓
Data download	✓	✓	SIL2 EN 61508 Functional safety	✗	✓
Configure remotely	✓	✗			



M-JET®.COM

CONNECTED SYSTEM

CAPABILITIES WHEN THE M-JET IS CONFIGURED WITH A UTM BOX AND AN INTERNET OR LAN CONNECTED COMPUTER:

- Remote monitoring of several M-JETs from the same display
- Unified viewing of data in real time
- Graphic display of historical data
- Viewing of alarms
- Alarm notification by sending email
- Support tools to manage preventive maintenance



M-JET®.COM

Type	Name	Place	Status	Speed	Cpt/Day	Cpt/General
	EL01	Place 1	Ok	2,4m/s	5h	1125h
	EL02	Place 2	Alarm	-	8h	1850h
	EL03	Place 3	Ok	2,8m/s	3h	925h
	EL04	Place 4	Inactif	-	-	125h
	TB01	Place 1	Pre-Alarm	1,8m/s	7h	1575h

Elevator EL02 — Place STIF USA — 31 mach 2014 15h31 **Status: Alarm**

Dashboard
Temperature graph
Alarm graph
Alarm analysis
Maintenance
Param. M-JET.COM

UNDER SPEED

Speed	000	rpm
Under speed	10	%
No.2	-	
No.1	Ok	

TEMPERATURE

T° Max	80°C
No.4	65°C
No.3	68°C
No.2	58°C
No.1	56°C
T° Max	90°C
motor	73°C

MISALIGNMENT

No.4	Ok
No.3	Ok
No.2	Alarm
No.1	Ok

LEVEL & CHOKE

No.2	Ok
No.1	Ok

Access to graphics

Run time

Temperatures

Number of alarms

Ratio of alarms by type





www.stifnet.com



EUROPE

STIF (Head Office) Factory

Z.A. de la Lande
49170 Saint-Georges-sur-Loire - FRANCE
Tél.: +33 2 41 72 16 82
Fax: +33 2 41 39 32 12
E mail: sales@stifnet.com
Web: www.stifnet.com

STIF IBERICA Sales Office

La Selva - 21 Nave 2
Pol. Indus. Les Salines - 08880 Cubelles
BARCELONA - ESPAÑA
Telf.: +34 938 950 262
Fax: +34 938 950 298
E mail: ventas@stifiberica.es
Web: www.stifnet.com

AMERICA

STIF AMERICA Sales Office

Oficina 4-04—Centro Empresarial Mar del Sur
Calle Primera El Carmen—Panamá
Rep. de PANAMÀ
Tel.: +507 393-3787
Tel.: +507 261-5223
Email: stifamerica@stifnet.com

ASIA

STIF (SUZHOU) Factory

Unit 7, N°2318
East Taihu Lake Road
Wuzhong District, Suzhou City
Jiangsu Province, CHINA
Ph.: +86 512 6656 8968
Fax: +86 512 6656 9128
E mail: sales@stif.cn
Web: www.stif.cn

STIF ASIA Sales Office

2 Jurong East St 21
#04-28K IMM Building
SINGAPORE 609601
Ph.: +65 6563-2098
Fax: +65 6562-6083
E mail: sales@stif.com.sg
Web: www.stifnet.com

PT. STIF INDONESIA Sales Office

Jl. Ratna n° 1A
BEKASI – 17412
INDONESIA
Ph.: +62 21 8499 6745
Fax: +62 21 8499 5151
Email: indo@stif.com.sg

