

# IMPACTMANAGER® RF & ID



ShockWatch® ImpactManager® RF and ID monitor access control, impact, and utilization of material handling equipment. These products are designed to reduce damage-related expenses due to improper operation and create a safer work environment.

When integrated with a forklift, ImpactManager RF and ID detect impacts and record the event details, such as date, time, and driver identification. The data is then transmitted wirelessly for the RF or downloaded through several user interface options for the ID. These user interfaces also assist in controlling access by ensuring that only trained or certified drivers operate the equipment.

The ImpactManager software allows companies to customize equipment operating parameters and to generate a variety of reports and graphs for analysis.



Use ImpactManager on:  
Electric forklifts  
Internal combustion forklifts  
Narrow aisle (reach) forklifts  
Rough terrain forklifts  
Electric pallet forklifts  
Walkie / rider forklifts  
Order picker forklifts  
Turret forklifts  
Double reach forklifts  
Other counterbalance forklifts  
Construction equipment  
...and much more

## ■ Benefits

- Reduces operator, facility, equipment, and product damage due to impacts
- Reduces costs associated with damage and worker injury
- Increases operator accountability, improves driving behavior, and reduces worker injury
- Enables compliance with OSHA by tracking operator training schedules and operator certification
- Reinforces safe vehicle operation and procedures without supervisory presence
- Creates immediate awareness of impacts by sounding an alarm or lift horn
- Allows for immediate corrective action following an impact
- Allows for immediate maintenance and repairs following an impact
- Allows for e-mail notification of pre-selected events (ImpactManager RF only)
- Provides easy access to real-time impact and operator data for analysis and more effective decision making
- Reduces material handling equipment downtime and repair costs

## ■ Features

- Real-time impact detection and recording through patented, user-adjustable sensor
- Vehicle access control via multiple user-defined interfaces (iButtons, barcode, and proximity cards)
- Pre-shift OSHA safety checklist acknowledgment
- Operator certification tracking
- Multiple wireless data transmission options (802.11b/g, 900MHz, and 2.4GHz)
- Lock-out / tag-out capability
- Voltage monitoring
- Event data e-mail capability
- User-definable maintenance alert
- Inactivity log-off
- LED for quick operational verification
- Management software operation in local workstation, LAN, and WAN, with export capabilities
- Variety of reporting and graphing capabilities
- Operational over a 10V to 60V DC range
- 98dB output alarm
- UL rating—Type E, EE, G, GS, LP, LPS, D, and DS

## ■ Software

At the heart of this ShockWatch innovation is its proprietary software package. The information you receive is critical to your business, and we designed the ImpactManager software to set equipment operating parameters, record operator activity, track operator certification, set equipment maintenance schedules, and disable the equipment upon impact. The software ensures timely, reliable, and accurate operator and equipment data to put the power of knowledge in your hands when and where you need it—allowing you to make better decisions to reduce damage-related costs.

- Runs on Windows® NT, 2000, and XP operating systems
- Easy to install, use, and train

Unit	Time	Hits	Hours Per Hit
55	2141:16	1	2141:16
15	1481:44	0	1481:44
35	4249:59	6	708:19
77	504:40	1	504:40
45	1942:58	4	485:44
66	405:58	8	50:44
25	1594:59	42	37:58

Monitor impact frequency

Unit	Logged On	Logged Off	Active	Idle	On %	Off %	Active %	Idle %
15	1813:57	6922:03	1481:44	332:13	20	79	81	18
25	1936:06	6800:54	1594:59	340:07	22	77	82	17
35	4720:33	4015:27	4249:59	470:34	54	45	90	9
45	2267:05	6468:55	1942:58	324:07	25	74	85	14
55	2838:06	5897:54	2141:16	696:50	32	67	75	24
66	735:31	8000:29	405:58	329:33	8	91	55	44
77	962:39	7773:21	504:40	457:59	11	88	52	47

Monitor equipment use

## ■ User Interface Options:

*Included:*

### iButtons



With an ImpactManager RF or ID mounted on a forklift, operators are required to “log on” using the green Operator iButton, supporting OSHA compliance by tracking operator ID and certification. Additional iButtons are used to configure operating parameters, program maintenance alerts, lock down equipment, reset, and retrieve equipment data for download.

### iButton Reader



A standard component connected to the ImpactManager RF and ID, the iButton reader is a receptacle for the iButton.

## *Additional Options and Accessories:*

### Proximity Card Reader



The proximity card reader is housed in a water-resistant enclosure with flexible mounting options. Can be used as an alternative to iButtons.

### Infrared Barcode Reader



Uses an infrared beam to read encoded information on barcode media. Can be used as an alternative to iButtons.

### DataRanger



An optional data collection device for the ImpactManager ID that can be used in lieu of the yellow iButton Manager's key. DataRanger downloads information from up to 50 pieces of equipment and stores the data in static memory, protecting information in case of power loss.

# IMPACTMANAGER<sup>®</sup> RF & ID

## ■ Specifications

### Operating Temperature

-4°F / -20°C to 140°F / 60°C  
(optional heater available for cold room applications)

### Operating Humidity

0–100% noncondensing

### Sensor

Adjustable magnetic

### Impact Detection Range

User-adjustable threshold 0.3G to 7G

### Operating Shock

10G (nondestructive) / 100G (destructive)

### Shock Resistance

4G at 11ms

### Vibration Resistance

20G @ 10 to 25Hz

### Output Alarm

Piezoelectric 98dB

### Case Size

4.33" x 4.33" x 2.8"

### Case Material

Polystyrene

### Case Rating

NEMA 4X

### Weight

2.5lbs

### Relay Output

Normally open contact fused @ 5amps  
(2AG 5amp @ 125V)  
Normally closed contact fused @ 10amps  
(2AG 5amp @ 125V)

### Data Storage Capacity

400 events / operator log-on and -off /  
impact time and date

### Data Retrieval

iButton (ImpactManager RF or ID)  
Wireless data transmission (ImpactManager RF)

### Radio Specifications

#### 900MHz:

RF transmission frequency: 902–928MHz, unlicensed  
ISM band  
Radio type: frequency-hopping spread spectrum  
Frequency control: Direct FM  
Data rate: 9600bps  
Transmit power output: 100mW nominal  
Transmission range — inside: 6,00' to 1,500'  
Transmission range — outside: 1,500' to 2,500'  
FCC ID: OUR9XTREAM  
FCC RF exposure requirements: Maintain a 20cm  
separation from the antenna to any nearby persons

#### 802.11b Wi-Fi:

IEEE 802.11b direct sequence compliant protocol  
FCC Part 15 Class B, ETS 300.339  
Compliance bandwidth: 2.4 to 2.5GHz  
Receiver sensitivity: -8dB

For more information on ShockWatch's position on RoHS, EU Directive 2002/95/EC, Amendment Commission Decision 2005/618/EC, and our certificates of compliance, please visit [www.shockwatch.com](http://www.shockwatch.com).

This document contains trademarks and registered trademarks of ShockWatch, Inc., and Media Recovery, Inc., in the United States of America. This document contains text and graphics that are individually protected by copyright.

# SHOCKWATCH<sup>®</sup>

DAMAGE PREVENTION. WE'RE ON IT.

1111 W. Mockingbird Lane, Suite 1050 | Dallas, Texas 75247

800.527.9497 | Fax 214.638.4512 | [info@shockwatch.com](mailto:info@shockwatch.com)

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

Your Authorized Representative