

FALL DETECTION *extract from Data Sheet*

Extraction of Characteristics DPDM
 DPDM Algorithm „Dosch Probability Density Model“
 Fall detected within 1,25 sec
 „Product to Floor“ event configurable ON/OFF
 False Alarm (all movements) typ <2%
 with option abortion 0%
 False Alarm „Product to Floor“ typ <0,5%
 Fall Detection (all events) typ >85%
 easy falls typ >75%
 heavy falls typ >95%



Fall Detection via DPDM algorithm

| | TOTAL | | | 84% | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | HEAVY | | | MEDIUM | | | EASY | | |
| | stumble | forward | backward | from chair | forward | backward | sideways | forward | backward |
| 225 events | 96% | 100% | 92% | 72% | 84% | 80% | 72% | 80% | 76% |
| 1 | fall | fall | fall | need help ? | need help ? | fall | no | fall | no |
| 2 | fall | fall | fall | fall | fall | fall | fall | fall | fall |
| 3 | fall | fall | fall | no | fall | fall | fall | no | fall |
| 4 | fall | fall | fall | fall | fall | no | no | fall | fall |
| 5 | fall | fall | fall | need help ? | fall | need help ? | need help ? | fall | fall |
| 6 | fall | fall | fall | need help ? | no | need help ? | fall | fall | need help ? |
| 7 | no | fall | fall | fall | fall | fall | fall | no | need help ? |
| 8 | need help ? | need help ? | need help ? | no | need help ? | fall | fall | need help ? | no |
| 9 | fall | fall | no | no | fall | need help ? | need help ? | no | no |
| 10 | fall | fall | fall | need help ? | fall | fall | no | fall | fall |
| 11 | fall | fall | need help ? | fall | fall | fall | need help ? | fall | fall |
| 12 | fall | fall | fall | fall | no | fall | no | fall | no |
| 13 | fall | fall | fall | need help ? | fall | fall | fall | fall | fall |
| 14 | fall | fall | fall | need help ? | fall | fall | fall | fall | fall |
| 15 | fall | fall | fall | fall | fall | need help ? | need help ? | no | fall |
| 16 | fall | fall | fall | no | need help ? | no | fall | need help ? | fall |
| 17 | need help ? | fall | fall | no | fall | need help ? | fall | fall | fall |
| 18 | need help ? | need help ? | fall | no | fall | fall | fall | fall | fall |
| 19 | fall | fall | fall | need help ? | fall | need help ? | no | fall | fall |
| 20 | fall | fall | fall | need help ? | fall | fall | no | fall | fall |
| 21 | fall | fall | fall | need help ? | no | no | need help ? | fall | fall |
| 22 | fall | fall | fall | fall | no | fall | need help ? | fall | fall |
| 23 | fall | fall | no | need help ? | fall | fall | fall | no | no |
| 24 | fall | fall | need help ? | fall | need help ? | no | fall | need help ? | no |
| 25 | fall | fall | need help ? | no | need help ? | no | no | need help ? | need help ? |

Fall Tests DA1432P DECT indePendant

Test Conditions

total 225 falls executed
 by 3 different persons aged 29, 45, 63 years old

3 strength categories : heavy, medium, easy
 each category with types: forward, backward plus
 heavy stumble & fall
 medium from chair
 easy sideways

Results

detected falls

heavy category 96%
 medium category 79%
 easy category 76%
 all categories 84%

Glossary

„fall“ automatic help call sequence
 „need help?“ IVA advice to press help button
 no movement=> automatic help call

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 responsible DOSCH&AMAND Products GmbH
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 all data subject to change

special function

product-on-floor ON