

# PRODUCT INFORMATION BROCHURE

## E**\***STAR DETONATOR



E**\*STAR detonator** is characterized by maximum safety, timing accuracy and variability of initiation for most of the blasting applications. Using the E★STAR Tester it is possible to check E★STAR detonators anytime. Using E★STAR Logger it is possible to program the detonators to any delay within the range from 1 to 20,000 ms. Using the E★STAR Blaster it is possible to fire up to 1,600 E★STAR detonators per blast. Using E★STAR Remote Blaster and E★STAR Remote it is possible to control blast initiation remotely. Using the dual blasting mode, 3,200 E★STAR detonators can be fired at once.

### PRODUCT OVERVIEW

#### **EQUIPMENT**

The system should be operated only by trained and authorized personnel using the dedicated equipment designed specifically for operating E\*STAR detonators. The currently approved equipment is E\*STAR Tester, E\*STAR Logger, E\*STAR Blaster, E\*STAR Remote Blaster and E\*STAR Mini Blaster, E\*STAR Remote and equipment for dual blasting E\*STAR Blaster Sync.



#### **BENEFITS**

- Copper shell for high water resistance and long sleep time
- Delay range 1 20,000 ms
- Minimum delay increment 1 ms
- Maximum accuracy 0.01% of nominal delay
- Up to 1,600 detonators controlled by 1 Blasting Machine and 1 Logger
- Multiple ways of programming
- Possible remote blasting
- Possible dual blasting up to 3,200 detonators in one shot
- Multi-level detonator verification prior each blast
- 100% verification of reliability of blast
- Color coded connectors, yellow for lengths up to 9 m and red from 12 m up

#### STANDARD TECHNICAL DESCRIPTION

| Detonator standard shell material     | Copper  |
|---------------------------------------|---|
| Detonator standard leg wires material | Copper coated steel   |
| Base charge                           | 720 mg  |
| Water pressure resistance             | 1 MPa / 28 days   |
| Temperature range for application     | -30 °C < T < +60 °C   |
| Shelf life (storage conditions)       | 5 years (-30 °C to 40 °C)   |
| Label marking                         | Product name, Wire length, Data matrix code (traceability), Detonator serial number (for RFID labels) |
| Delay interval                        | Programmable 1 – 20,000 ms (increments of 1 ms)   |
| Notified body                         | CE 1019   |

#### STANDARD PACKAGING DETAILS

| Wire length<br>(m) | Wire length<br>(ft) | Packaging 1.1B<br>UN 0511 (pcs) | Packaging 1.4B<br>UN 0512 (pcs) | Packaging 1.4S<br>UN 0513 (pcs) |
|--------------------|---------------------|---------------------------------|---------------------------------|---------------------------------|
| 6                  | 20                  | 80                              | 48                              | 48                              |
| 9                  | 30                  | 56                              | 40                              | 40                              |
| 12                 | 40                  | 40                              | 32                              | 32                              |
| 15 / 18 / 24 / 30  | 50 / 60 / 80 / 100  | X                               | X                               | 30*                             |

E\*STAR detonators are packaged in cardboard box of outer dimension 385 x 296 x 210 mm / 15.16 x 11.65 x 8.27 in.

## BUS-LINE

| Wire length (m) | Wire length (ft) | Units per box |
|-----------------|------------------|---------------|
| 400             | 1,300            | 4             |

Bus-line is packaged in cardboard box of outer dimension 490 x 245 x 160 mm / 19.29 x 9.65 x 6.30 in.

Contact your local Austin Powder representative for further information.

#### **Disclaimer of Warranties and Limitations of Liabilities**

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Our Mission is to improve the world we live in through the safe and responsible use of explosives.

Other wire lengths are possible on demand.

\*/ Delivered on spools. Every box contain a stick for easy manipulation.