

# E★STAR

## PRODUCT INFORMATION BROCHURE

**E★STAR** is characterized by maximum safety, timing accuracy and variability of initiation for most of the blasting applications. Using the LM-2 tester it is possible to check E★STAR detonators anytime. Using DLG1600-100 Logger it is possible to program the detonators to any delay within the range from 1 to 20,000 ms. Using the DBM1600-2-K Blasting Machine it is possible to fire up to 1,600 E★STAR detonators per blast. Using DBM1600-2-RC and WRFD it is possible to control blast initiation remotely. Using the dual blasting mode, 3,200 E★STAR detonators can be fired at once.



### 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

### 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 LM-2 tester, DLG1600-100 Logger, DBM1600-2-K, DBM1600-2-RC and DBM-1 Blasting Machines, Wireless Remote Firing Device and equipment for dual blasting DIM-1.



## AUSTIN POWDER

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### 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	Delay # (if preprogramed), Delay ms (if preprogramed), Product name, Wire length, Data matrix code (traceability)
Delay interval	Programmable 1 – 20,000 ms (increments of 1 ms)
Notified body	CE 1019

### STANDARD PACKAGING DETAILS

Wire length (m)	Wire length (ft)	Packaging 1.1B UN 0030	Packaging 1.4B UN 0255	Packaging 1.4S UN 0456
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 390 x 295 x 205 mm / 15,35 x 11,61 x 8,07 in.

Other wire lengths are possible on demand.

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

### BUS-LINE

Wire length (m)	Wire length (ft)	Packaging
400	1,300	4

Bus-line is packaged in cardboard box of outer dimension 400 x 240 x 160 mm / 15.75 x 9.45 x 6.30 in

Contact your local Austin Powder representative for further information.

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