

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.

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
- RFID technology for quick detonator tagging during programming

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.









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)	
	It is possible to equip every detonator label with RFID chip	
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 0511 (pcs)	Packaging 1.4B UN 0512 (pcs)	Packaging 1.4S 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 $385 \times 296 \times 210$ mm / $15.16 \times 11.65 \times 8.27$ 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)	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

Any information contained herein is based on the manufacturer's standard procedures in use at the time of publication. Any specifications, test values and other data is solely preliminary information and not guaranteed. Actual results may differ during field use. Neither manufacturer nor seller will be responsible whatsoever for any losses or damages resulting from the use or reliance upon any information set forth herein.

It is solely the responsibility of the product user to determine the safe conditions for use of the products referred to herein. Use of any products by a user is at the user's sole risk.

To the maximum extent permitted by law, manufacturer and seller specifically disclaim all warranties including <u>implied warranties</u> of merchantability or fitness for a particular purpose.



