



**DT100**

445-080 JANUARY 2012-REVISED MAY 2017

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## **IMAGENEX MODEL DT100 MULTIBEAM PROFILING SONAR**



Patent Pending

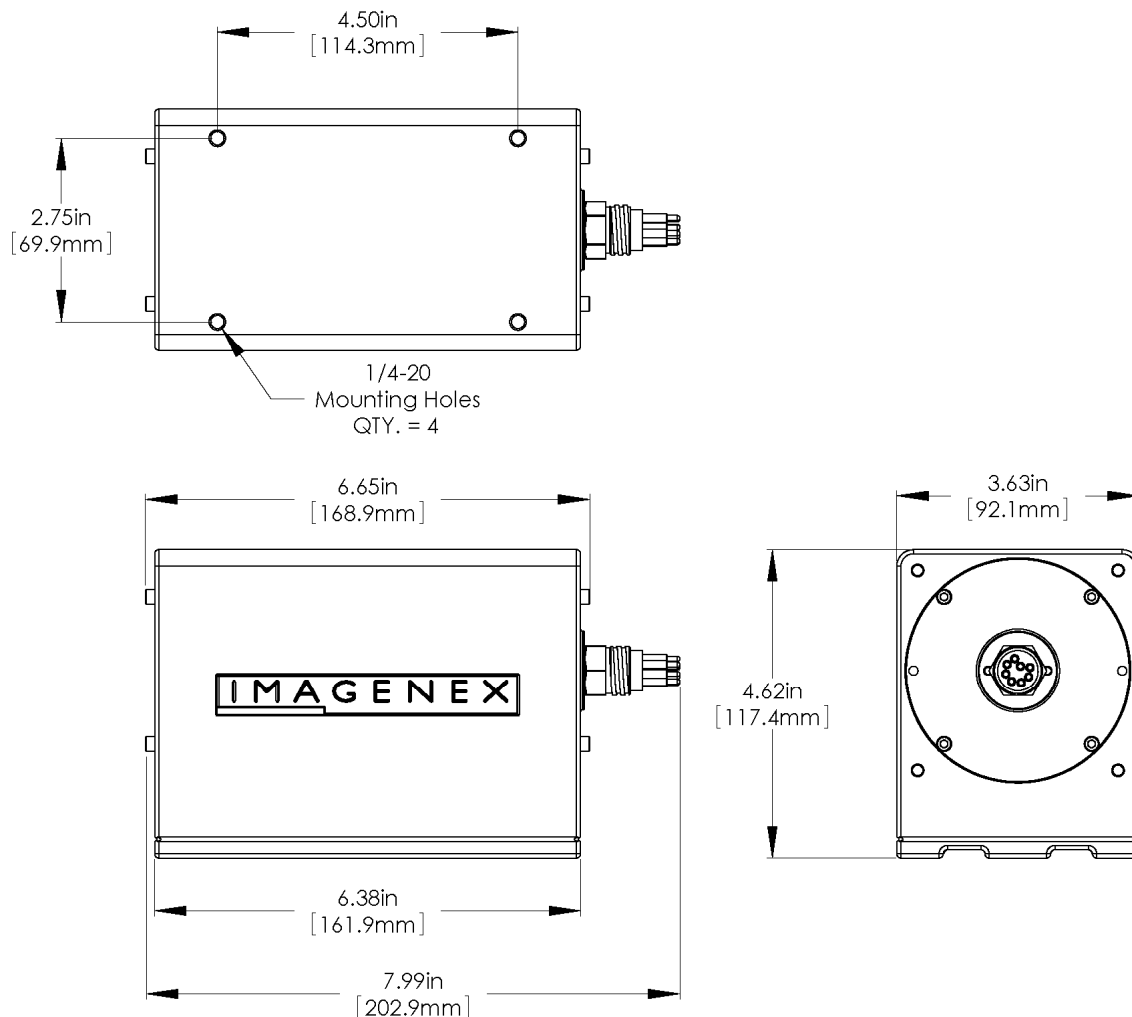
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**TAE KWANG ELECTRONICS CORPORATION**  
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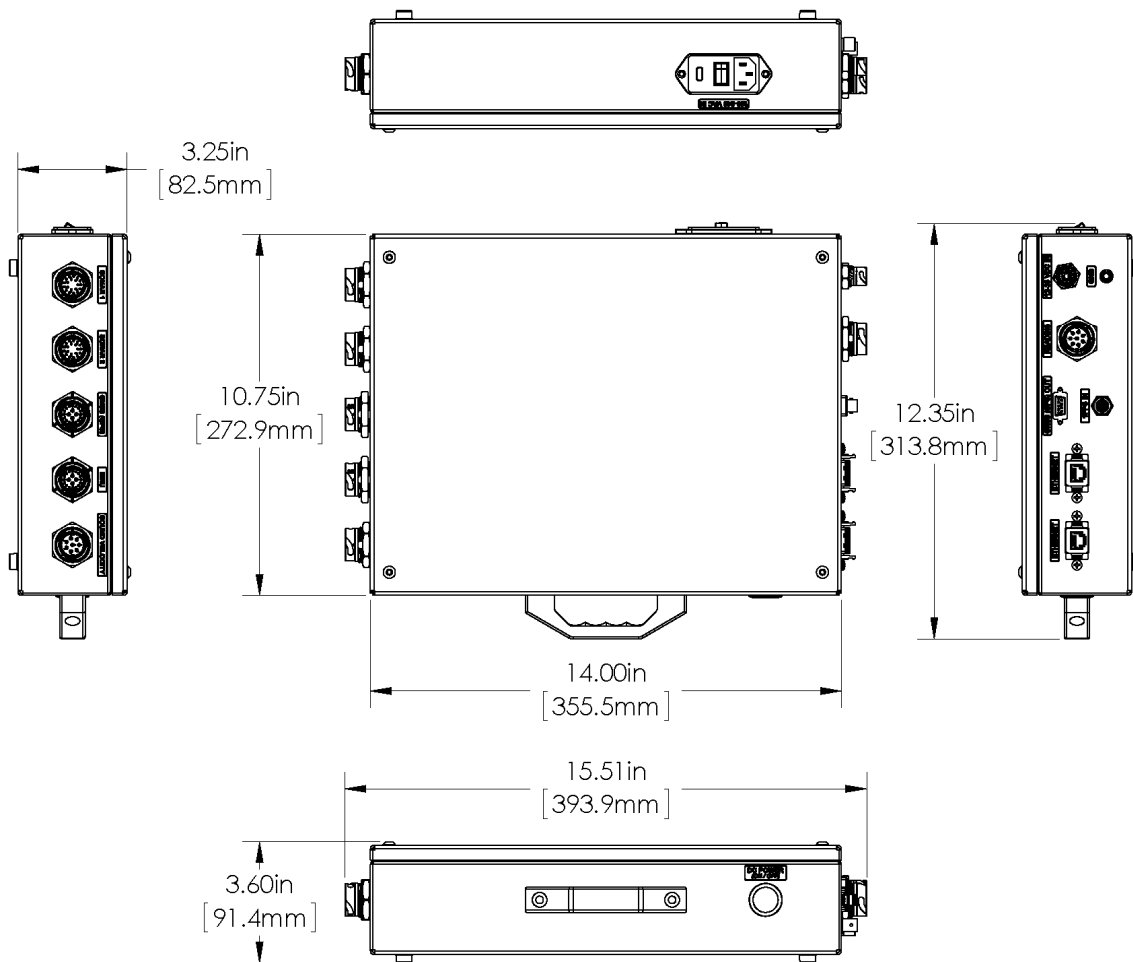
<b>HARDWARE SPECIFICATIONS:</b>	
<b>FREQUENCY</b>	240 kHz
<b>SWATH WIDTH (nominal beam geometry)</b>	Transmit: 120° x 3° Receive: 120° x 3°
<b>EFFECTIVE BEAM WIDTHS</b>	Narrow: 0.75° Medium: 1.5° Wide: 3°
<b>NUMBER OF BEAMS</b>	Default: 480 Selectable: 240, 120
<b>RANGE RESOLUTION: SCREEN OUTPUT</b>	0.2% of range 0.02% of range
<b>RANGE</b>	60 m (197') water depth 100 m (328') slant range
<b>MIN. DETECTABLE RANGE</b>	0.5 m (1.6') below transducer
<b>MAX. OPERATING DEPTH (Submersion depth)</b>	100 m (328')
<b>INTERFACE TO PC</b>	Ethernet (10 base-T) using TCP/IP
<b>MAX. CABLE LENGTH</b>	100 m (328') on CAT5-e, longer cable runs possible with additional hardware
<b>CONNECTOR</b>	Underwater wet-mateable 8 conductor
<b>POWER SUPPLY (sonar head only)</b>	22 - 32 VDC at less than 10 Watts
<b>DIMENSIONS</b>	162 mm (6.38") L x 117 mm (4.62") H x 92 mm (3.63") W
<b>WEIGHT: In Air</b>	8 kg (18 lbs) for Stainless Steel or ~2.7 kg (~6 lbs) for Delrin
<b>MATERIALS</b>	316 Stainless Steel, Epoxy, Stainless Steel connector Also available in Polyoxymethylene (i.e. Delrin) housing
<b>POWER SUPPLY/ TIMING BOX:</b>  <b>DT100 Sensor Interface Relay (DT100 SIR)</b>	2 port Ethernet switch (DT100 PC and Survey PC) Interfaces to: DT100 (1 or 2 units) GNSS (GPS) Motion Reference Unit Gyro / Heading Sensor Sound Velocity Sensor 100 – 240 VAC or 12 – 36 VDC input range Dimensions: 394 mm (15.5") x 325 mm (12.8") x 87 mm (3.5")
<b>MAX. PING RATE</b>	20 Hz

<b>SOFTWARE SPECIFICATIONS:</b>	<b>DT100.exe or DT100_SIR.exe (for SIR)</b>	
<b>WINDOWS™ OPERATING SYSTEM</b>	Windows™ XP, Vista, 7, 8, 10	
<b>DISPLAY MODES</b>	Sector, Linear, Perspective, Profile, Beam Test	
<b>PERSISTENCE (TRAIL)</b>	1 – 300 seconds	
<b>RANGE SCALES</b>	5 m, 10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m	
<b>SECTOR SIZES</b>	30°, 60°, 90°, 120°	
<b>FILE FORMAT:</b>		<b>For SIR:</b>
<b>RAW DATA</b>	(filename).837	(filename).D1R
<b>PROFILE POINT</b>	(filename).83P	(filename).D1P
<b>RECOMMENDED MINIMUM COMPUTER REQUIREMENTS:</b>	2 GHz Pentium 4 256 MB RAM 20 GB Hard Disk 1024 x 768 screen resolution	



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<b>ORDERING INFORMATION:</b>		
<b>100 m Stainless Steel UNIT</b>	Standard	837B-000-440
<b>100 m Delrin UNIT</b>	Standard	837B-000-441
<b>Sensor Interface Relay box (DT100 SIR)</b>	Option	837-000-007
IP Address*	Option	-020
Dual Head Software	Option	-024

\*Note: Standard IP Address is 192.168.0.2  
 A different IP Address may be specified upon ordering.

Product and company names listed are trademarks or trade names of their respective companies.

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