

## 4200 SERIES SIDE SCAN SONAR SYSTEM

#### **I FEATURES**

- · Optional Multi-Pulse (MP) technology for high speed surveys
- · Crisp, high resolution CHIRP images
- Multiple dual simultaneous frequency sets to choose from
- · Choice of stainless steel or lightweight aluminum towfish
- · Easily integrates to other 3rd party sensors
- · Meets IHO & NOAA Survey Specifications

### **APPLICATIONS**

- · Cable & Pipeline Surveys
- · Geological/Geophysical Surveys
- Mine Countermeasures (MCM)
- · Geohazard Surveys
- Channel Clearance
- · Search and Recovery
- Archeological Surveys





The 4200 Series is a versatile side scan sonar system that can be configured for almost any survey application from shallow to deep water operations. The 4200 utilizes EdgeTech's Full Spectrum® CHIRP technology to provide crisp, high resolution imagery at ranges up to 50% greater than non-CHIRP systems; thus allowing customers to cover larger areas and save money spent on costly surveys.

One of the unique features of the 4200 is the optional Multi-Pulse (MP) technology, which places two sound pulses in the water rather than one pulse like conventional side scan sonar systems. This allows the 4200 to be towed at speeds of up to 10 knots while still maintaining 100% bottom coverage. In addition, the MP technology will provide twice the resolution when operating at normal tow speeds, thus allowing for better target detection and classification ability. The addition of the optional MP technology provides the operator with two modes of operation; either High Definition Mode (HDM) or High Speed Mode (HSM). This software-selectable mode of operation provides the operator the ability to select the best configuration for the specific job type.

A 4200 system comes with a choice of a dual simultaneous frequency towfish available in either a stainless steel or lightweight aluminum housing depending on operational requirements. Customers can also choose between a rack mount or portable topside processor or a digital link to interface to 3rd party topsides and software.

For more information please visit EdgeTech.com



# 4200 SERIES SIDE SCAN SONAR SYSTEM

## KEY SPECIFICATIONS

SONAR SPECIFICATIONS	STANDARD WITH OPTIONAL MP TECHNOLOGY
Frequency	Choice of either 100/400, 300/600 or 300/900 kHz dual simultaneous
Operating Range (meters/side)	100 kHz: 500m, 300 kHz: 230m, 400 kHz: 150m, 600 kHz: 120m, 900 kHz: 75m
Horizontal Beam Width:	100 kHz: 1.5°, 300 kHz: 0.5°, 400 kHz: 0.4°, 600 kHz: 0.26°, 900 kHz: 0.2°  In High Speed Mode: 100 kHz: 0.34°, 300 kHz: 0.54°, 400 kHz: 0.3°, 900 kHz: 0.3°  In High Definition Mode: 100 kHz: 0.64°, 300 kHz: 0.28°, 400 kHz: 0.3°, 600 kHz: 0.26°, 900 kHz: 0.2°
Resolution Along Track	100 kHz: 5 m @ 200 m 300 kHz: 1.3 m @ 150 m 400 kHz: 0.6 m @ 100 m 600 kHz: 0.45 m @ 100 m 900 kHz: 18 cm @ 50 m 100 kHz: 2.5m @ 200m 300 kHz: 1.0m @ 200m 400 kHz: 0.5m @ 100m 600 kHz: 0.45m @ 100m 600 kHz: 0.45m @ 100m 900 kHz: 18 cm @ 50m 900 kHz: 18 cm @ 50m 900 kHz: 26 cm @ 50
Resolution Across Track	100 kHz: 8 cm, 300 kHz: 3 cm, 400 kHz: 2 cm, 600 kHz: 1.5 cm, 900 kHz: 1 cm
Vertical Beam Width	50°
Depression Angle	Tilted down 20°
TOWFISH	STAINLESS STEEL ALUMINUM
Diameter	11.4 cm (4.5 inches)
Length	125.6 cm (49.5 inches)
Longin	
Weight in Air/Saltwater	48 / 36 kg (105 / 80 pounds) 30 / 18 kg ( 66 / 40 pounds)
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Weight in Air/Saltwater  Depth Rating (Max)	48 / 36 kg (105 / 80 pounds) 30 / 18 kg ( 66 / 40 pounds) 500m
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors	48 / 36 kg (105 / 80 pounds) 30 / 18 kg ( 66 / 40 pounds)  2,000m 500m  Heading, pitch & roll
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port  Options	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No Depressor, Power Loss Pinger and Custom Sensors
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port  Options  TOPSIDE PROCESSOR	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No Depressor, Power Loss Pinger and Custom Sensors  4200-P  4200  701-DL INTERFACE
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port  Options  TOPSIDE PROCESSOR  Hardware	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No Depressor, Power Loss Pinger and Custom Sensors  4200-P  4200  701-DL INTERFACE  Portable splash-proof case  19" rack mount computer  Splash-proof laptop  21" flat panel monitor,  Customer-supplied
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port  Options  TOPSIDE PROCESSOR  Hardware  Display & Interface	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No Depressor, Power Loss Pinger and Custom Sensors  4200-P  4200  701-DL INTERFACE  Portable splash-proof case  19" rack mount computer  Splash-proof laptop  21" flat panel monitor, keyboard & trackball
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port  Options  TOPSIDE PROCESSOR  Hardware  Display & Interface  Power Input	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No Depressor, Power Loss Pinger and Custom Sensors  4200-P  4200  Portable splash-proof case  19" rack mount computer  Splash-proof laptop  21" flat panel monitor, keyboard & trackball  20-36 VDC or 115/230 VAC  115/230 VAC
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port  Options  TOPSIDE PROCESSOR  Hardware  Display & Interface  Power Input  Operating System	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No Depressor, Power Loss Pinger and Custom Sensors  4200 701-DL INTERFACE  Portable splash-proof case 19" rack mount computer 19" rack mount interface  Splash-proof laptop 21" flat panel monitor, keyboard & trackball  20-36 VDC or 115/230 VAC 115/230 VAC 115/230 VAC  Windows© XP Pro
Weight in Air/Saltwater  Depth Rating (Max)  Standard Sensors  Optional Sensor Port  Options  TOPSIDE PROCESSOR  Hardware  Display & Interface  Power Input  Operating System  File Format	48 / 36 kg (105 / 80 pounds)  2,000m  500m  Heading, pitch & roll  (1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC  Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder No Depressor, Power Loss Pinger and Custom Sensors  4200-P  4200  701-DL INTERFACE  Portable splash-proof case  19" rack mount computer  Splash-proof laptop  21" flat panel monitor, keyboard & trackball  20-36 VDC or 115/230 VAC  Windows© XP Pro  Native JSF or XTF

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