



Single Channel



Dual Channel

### MasterPoint S2

The Beel Technologies MasterPoint S2 SSR monitor provides continuous verification of integrity, accuracy, phase and azimuth alignment of secondary surveillance radars and includes the following features:

- Single or dual channel version
- Automatic switchover (dual channel only)
- Operation in modes 3/A, C and S Level 2
- Fully solid state
- Modular construction
- Directional antenna
- Integral 50 dB attenuator
- Low lifetime cost
- Indoor 19 inch rack mounting
- Mode S features:
  - Full level 2 plus datalink
  - Meets European mandate for Elementary Surveillance
  - Handles Intermode & Formats 0,4,5,11,20,21
  - Flight ID on front panel

### SPECIFICATIONS

**Part Numbers :** 31132 – Single Channel

32162 – Dual Channel

#### Transmitter

Transmit Frequency 1090 ± 1 MHz  
 Transmit Power 125 Watts peak (minimum)  
 500 Watts peak (maximum)

#### Dimensions (L x W x H)

Single channel (3U) 463 x 484 x 134 mm  
 Dual channel (6U) 563 x 484 x 268 mm  
 Antenna 457 x 584 x 178 mm

#### Receiver

Center Frequency 1030 ± 0.5 MHz  
 Sensitivity -74dBm ±3dB

#### Weight

	31132.000	32162.000
SSR Monitor	11 kg	18 kg
Antenna	4.5 kg	

#### Parameters

Interrogation Modes 3/A ,C, S Level 2  
 Altitude 0-62000 ft in 1000-ft steps  
 Range Delay 0.3-300 NM in 0.1 NM steps

#### Reliability

	31132.000	32162.000
MTBF (hours)	30,000	56,000
MTTR (minutes)	24	30

#### Antenna

Frequency Range 1020 to 1100 MHz  
 Construction Full wave backfire  
 Impedance 50 Ohms  
 Gain 12.5 ± 0.5 dBi

#### Environmental

Operating Temperature 0° C to + 40° C  
 Storage -40° C to + 65° C  
 Relative Humidity Up to 90% , non-condensing  
 Altitude, Operating Up to 3,000 m  
 Altitude, Non-Operating Up to 5,000 m  
 Weather, Antenna Up to 100% humidity  
 Wind 158 km/hr with driving rain or 4 cm of ice loading.  
 Up to 240 km/hr wind while not operating.

#### Power

AC Input 86-264V AC  
 (24V DC optional)  
 Frequency 47-63Hz  
 Power consumption 60 watts (31132)  
 100 watts (32162)

**MasterPoint S2 Options**

Option Number	Description
000	Standard configuration Mode S Level 2 test transponder
00E	LCD touch screen and remote control via embedded web browser
040	Uninterruptible Power Supply (UPS) unit provides continuous AC power in the event of short duration power loss
071	Short depth 19" rack mount chassis, ground bit set 24V DC power input, antenna not included.
075	Short depth 19" rack mount chassis, ground bit set 100-250V AC 50/60 Hz input, antenna not included.
080	BITE reporting through Mode C replies (priority encoded altitude increases)
100	Support for Mode 1 & 2 replies in accordance with the DOD AIM565-1000B
B00	Mode B APM (Antenna Pattern Monitoring) support – uses a Mode B interrogation pattern to remotely enable Antenna Pattern Monitoring mode

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