

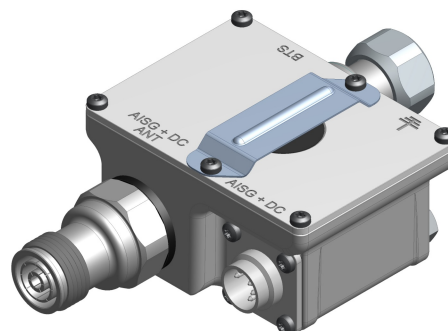
SBT0003F1V1

SMART BIAS TEE - BTS SIDE/BOTTOM OF TOWER

The Kaelus SBT0003 provides a flexible Smart Bias Tee solution allowing for AISG and DC to be placed onto a feeder at the bottom of the tower or extracted from the feeder at the top. Operating across all the cellular frequency bands, the SBT0003 provides the following additional benefits.

FEATURES

- 555-3800MHz operation provides coverage in 600MHz through 3.5GHz frequency bands
- Available in top of the tower or bottom of the tower applications
- Primary surge protection limits the voltage let-through from the feeder to the DC port
- Multiple connector configurations to allow for different installation scenarios
- IP67 for continuous outdoor operation



TECHNICAL SPECIFICATIONS

RF TO RF+AISG	
Passband	555 - 3800MHz
Insertion loss	0.1dB maximum
Return loss	20dB minimum
Maximum input power	750W CW/5kW PEP
Intermodulation products	-160dBc (IM3) maximum @ 2 x 20W CW carriers
RF impedance	50Ohms
AISG TO RF+ AISG	
AISG version	2.0 compliant
DC voltage rating	+10 to +30V
DC current rating	2.7A continuous, 4A (10 sec at startup) peak
DC resistance, AISG port to RF + AISG	0.5Ohm typical
Isolation, 555 - 3800MHz	65dB minimum
Return loss 2.076 – 2.276MHz	10dB minimum
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-40°C to +65°C -40°F to +149°F, indoor
Ingress protection	IP67 / outdoor
Altitude	3km / 10k ft maximum
Lightning protection	RF: ±5kA (8/20µs), AISG: 2kA (8/20µs)
MTBF	>1,000,000 hours
Compliance	3GPP, TS25.461, RoHS compliant
Surge protection	Multi-stage network
MECHANICAL	
Dimensions H x D x W	61x83x48mm 2.40x3.27x1.89in
Weight	0.4kg 0.88lbs
Finish	Aluminium
Connector 1	RF: 2 x 4.3/10, gender varies see ordering information for details
Connector 2	AISG/DC: V1 and V3: AISG male (bottom of feeder) connect to controller V2 and V4: AISG female (end of feeder) connect to RETs
Protective earth	M6 stud

ORDERING INFORMATION

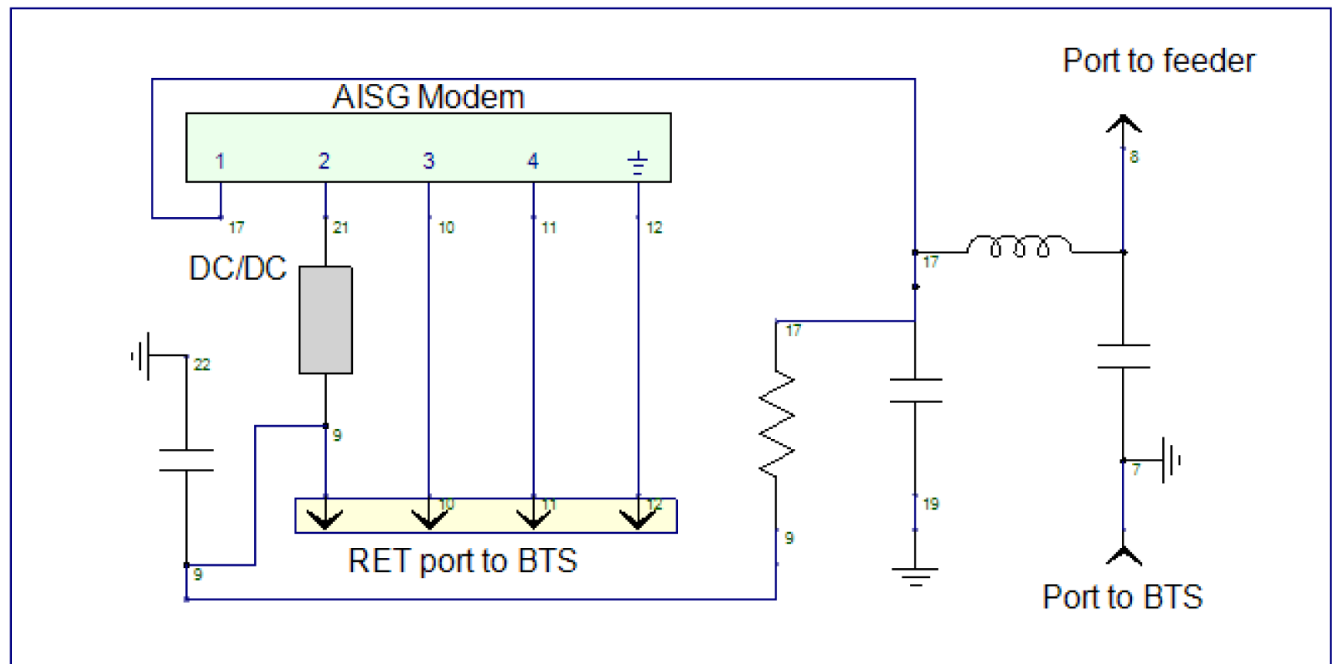
PART NUMBER	DESCRIPTION
SBT0003F1V1	SMART BIAS T, 4.3-10M BTS 4.3-10F ANT AISGM STD bottom of the tower
SBT0003F1V2	SMART BIAS T, 4.3-10F BTS 4.3-10M ANT AISGF STD top of the tower
SBT0003F1V3	SMART BIAS T, 4.3-10F BTS 4.3-10M ANT AISGM STD bottom of the tower
SBT0003F1V4	SMART BIAS T, 4.3-10M BTS 4.3-10F ANT AISGF STD top of the tower

OPTIONAL ACCESSORIES

PART NUMBER	DESCRIPTION
ACU0001F1V1	AISG controller-3 way-rack mounted
R18-0749-1	Cable assembly - AISG outdoor cable-male to female - 1m
R18-0749-3	Cable assembly - AISG outdoor cable-male to female - 3m
R18-0749-5	Cable assembly - AISG outdoor cable-male to female - 5m
R18-0749-10	Cable assembly - AISG outdoor cable-male to female - 10m
R18-0749-15	Cable assembly - AISG outdoor cable-male to female - 15m

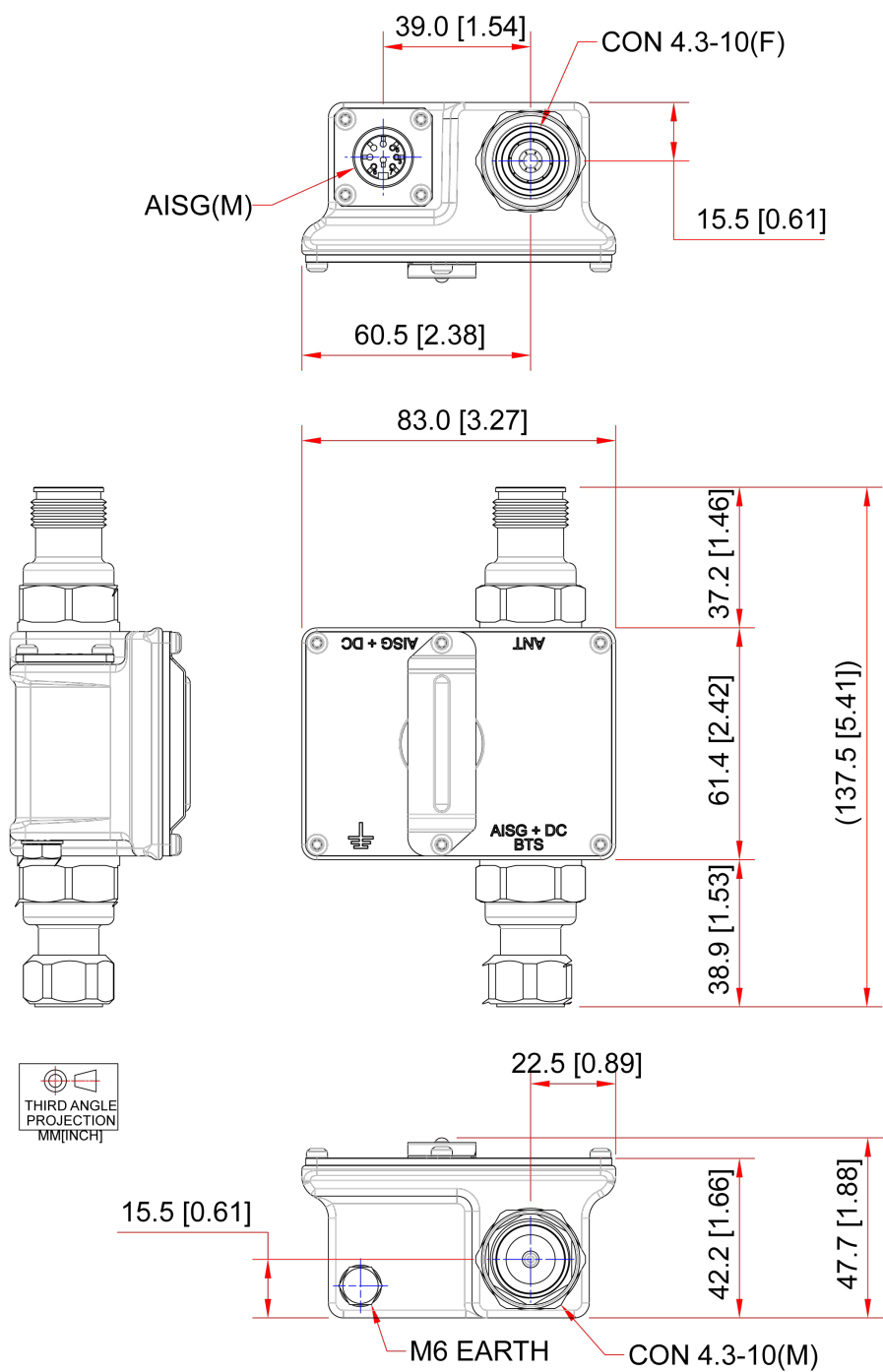
ELECTRICAL BLOCK DIAGRAM

Feeder



BTS

MECHANICAL BLOCK DIAGRAM



Version Shown	SBT0003F1V1
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