TIMBER SWEET
AUSTRALIA

M-FEAR · MINIATURE FRONT END AGNOSTIC RECEIVER

The world's most affordable Link 16 transceiver.

Enabling BLink in contested environments. An attritable, low-cost, software defined transceiver that enables tactical communications in contested areas without putting cryptographic items at risk. Developed by Timber Sweet. Supplied and supported in Australia by Timber Sweet Australia.

SOFTWARE DEFINED | CRYPTO-LESS | LOW SWAP | COTS



<1.36 kg
12.7 × 9.1 × 4.8 CM

30 MHz–3 GHz
BASE FREQUENCY RANGE

8×8 MIMO
8 RX + 8 TX CHANNELS

NEWCASTLE NSW, AUSTRALIA

LOW LOSS SOLUTIONS PTY LTD TRADING AS TIMBER SWEET AUSTRALIA

WHAT M-FEAR ENABLES

Link 16 at the forward edge, without the crypto.

Small, rugged and designed for flexible use across many platforms, M-FEAR enables the proliferation of Beyond Line-of-Sight Link (BLink) operations through low-cost, crypto-less devices deployable to the forward edge.

M-FEAR provides the "black side" of the radio. The cryptographic processing stays safely at home, so losing a forward platform does not put a Controlled Cryptographic Item at risk.



DESIGNED FOR

Small, affordable and built to grow.

Low SWaP design

Low size and weight enable Link 16 on small attritable platforms for the first time.

Affordable COTS

A high-quality product and support as a Commercial Off The Shelf (COTS) item, at the best price on the market.

Built for growth

Delivered with Link 16 basic capability, and designed for future waveform growth and expansion to support a wide range of missions.

PLATFORMS

Turn almost any platform into a BLink node.

M-FEAR is built for easy integration into a wide range of platforms, transforming them into flexible and capable BLink nodes.

01 **Unmanned aerial vehicles** (UAVs)

02 **Unmanned surface vehicles** (USVs)

03 **Pre-deployed fixed sites**

04 **Roll-on roll-off kits**

05 **Pod-based solutions**

M-FEAR at a glance.



Frequency range

Base: 30 MHz to 3 GHz
Future growth: 0 MHz to 7.125 GHz

Instantaneous bandwidth and MIMO

Wideband direct RF sampling, up to 2.5 GHz instantaneous bandwidth per channel. Full 8×8 MIMO (8 RX + 8 TX) for advanced anti-jam, beamforming, direction finding and multi-channel operations.

Clock reference

5 ppb precision TCXO for high timing stability and network synchronisation.

Transmit power

10 W with variable power control.

Link 16 operations

"Black side" Link 16 capability when paired with a compliant red waveform and cryptographic processing. Single antenna operation with growth to dual antenna. Standard Link 16 message types and single reception. Enhanced Throughput (ET) modes, with growth to Concurrent Multi-Netting (CMN-4) for increased data throughput and multi-net receive.

Power consumption

Input: +12 V nominal (DC/DC conversion external where required). Average system power: 25 W maximum. Peak during transmit slots: 100 W.

Size and weight

12.7 × 9.1 × 4.8 cm (5 × 3.6 × 1.9 in)
Under 1.36 kg (3 lb)

Environmental

Operating temperature –40 °C to +70 °C. Designed for MIL-STD-810H Method 514.8 Category 24.

EMI / EMC

Designed for MIL-STD-461H.

Future growth and expansion

Modular for integration, testing, maintenance and future expansion, for example additional front-end variants for growth waveforms such as HF, UHF/VHF, SATURN, TTNT, SATCOM, Link 182 or 5G.

AVAILABILITY

Coming soon: mid 2027.

ITEM	PART NUMBER
M-FEAR transceiver	TSC-MFR-001
M-FEAR integration kit	TSC-MFR-002
M-FEAR support equipment	LITE KIT: MFEAR
M-FEAR / BLink operator training	TSC-TRN-MFR-001

> TIMBER SWEET
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> **"We provide the agility of a small company combined with the expertise of a larger one."**

Quick action, integrity and high-quality products and services. Collaborative team players, committed to the mutual success of everyone involved.

01

Supplied in Australia

Ordered, delivered and supported locally by Timber Sweet Australia, working directly with Timber Sweet.

02

Integration support

The M-FEAR integration kit and support equipment help bring it onto your UAV, USV, pod or fixed site.

03

Operator training

M-FEAR and BLink operator training, so your team can deploy and run BLink nodes with confidence.

CONTACT US

Talk to Timber Sweet Australia about M-FEAR.

Ask for a briefing, a quote or integration support. A director will come back to you.

enquiries@lowlosssolutions.com.au

TIMBER SWEET AUSTRALIA

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M-FEAR is developed by Timber Sweet (USA). For U.S. and other international enquiries, please contact Timber Sweet: timber-sweet.com

Imagery is illustrative and AI-generated, based on product images courtesy of Timber Sweet. It does not depict actual ADF personnel, equipment or operations and does not imply Defence endorsement. Specifications are from the Timber Sweet M-FEAR datasheet (August 2026) and may change. © 2026 Low Loss Solutions Pty Ltd (ABN 33 664 010 315), trading as Timber Sweet Australia.