WORLD FIRST | VERIFIED QSOs | TESTED ON-AIR

IU8LMC

FT2

THE FASTEST DIGITAL MODE EVER CREATED

First contact in the world completed on February 16, 2026

3.8-second cycles — Complete QSO in 11 seconds

4x faster than FT8 — 2x faster than FT4

VERIFIED CONTACTS ON 40m AND 80m — FEBRUARY 16, 2026

WSJT-X v3.0.0-rc1 — FT2 Mode — UTC Timestamped Log

IZ8VYF

Campania, Italy

Banda	40m - 7.077 MHz
SNR	-12 dB
DT	0.6s

QSO completed

IZ8XXE

Campania, Italy

Banda	80m - 3.582 MHz
SNR	+11 dB
DT	0.8s

QSO in 7 seconds

IC8TEM

Capri, Italy

Banda	80m - 3.582 MHz
SNR	+12 dB
DT	0.8s

QSO in 11 seconds

TECHNICAL SPECIFICATIONS

Modulation	8-GFSK	FEC Coding	LDPC (174,91)
Payload	77 bit	T/R Cycle	3.8 seconds
Bandwidth	~150 Hz	Sensitivity	-12/-13 dB S/N
Tones	8 (spacing ~17 Hz)	Software	WSJT-X v3.0.0-rc1 (modified)

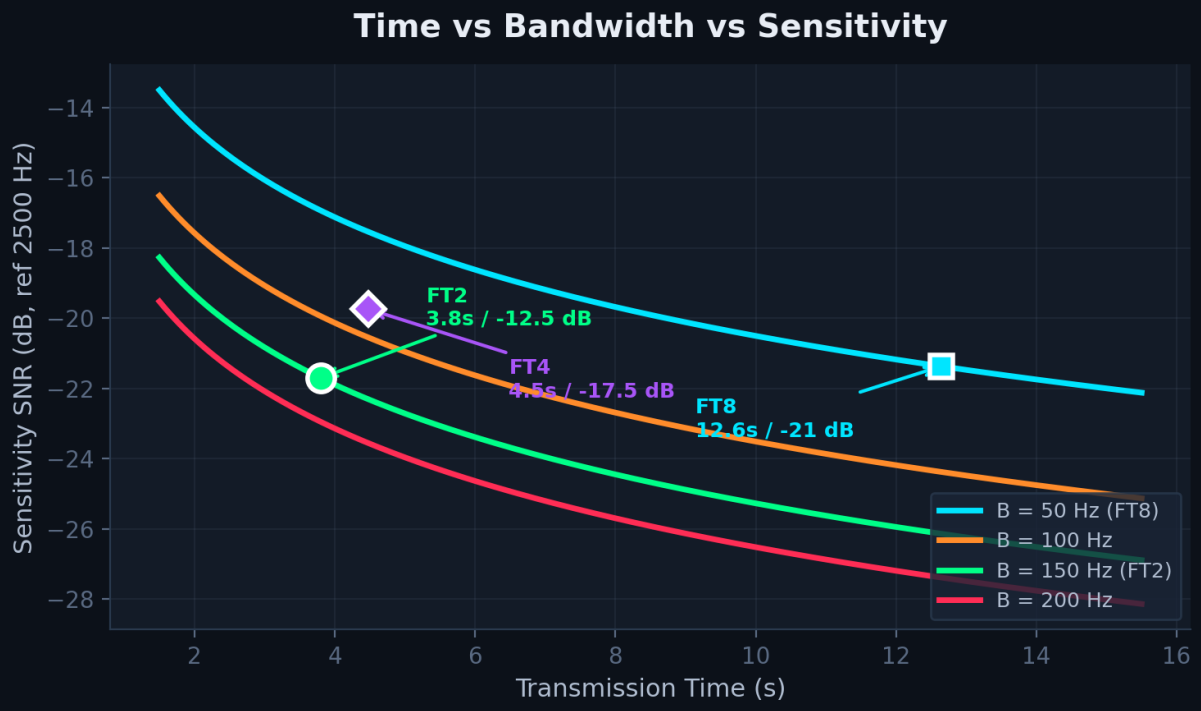
DECODIUM 2.0

Developed by IU8LMC — ARI Caserta — San Prisco, CE, Italy

#FT2 #WorldFirst #HamRadio
#IU8LMC #DECODIUM #MadeInItaly

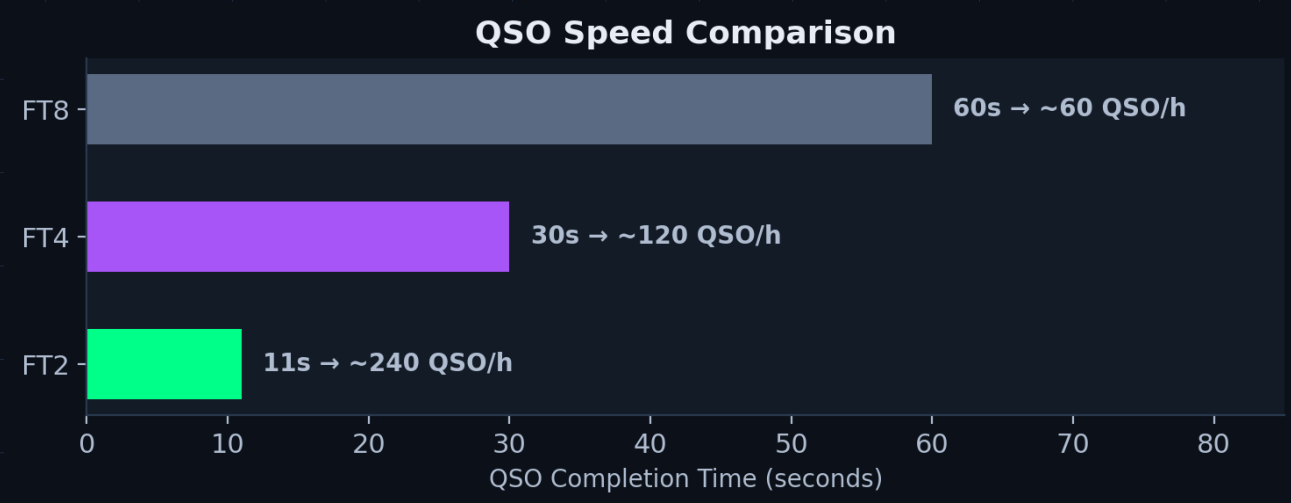
FT2 — TECHNICAL ANALYSIS

SENSITIVITY vs TIME vs BANDWIDTH



The chart shows the engineering trade-off behind FT2. At 3.8 seconds with 150 Hz bandwidth (green curve), sensitivity is approximately -12/-13 dB. The loss compared to FT8 (-21 dB) is about 8 dB, but this is offset by a 4x increase in speed. For strong-signal scenarios such as DXpeditions, contests, and pile-ups, this trade-off is highly favorable.

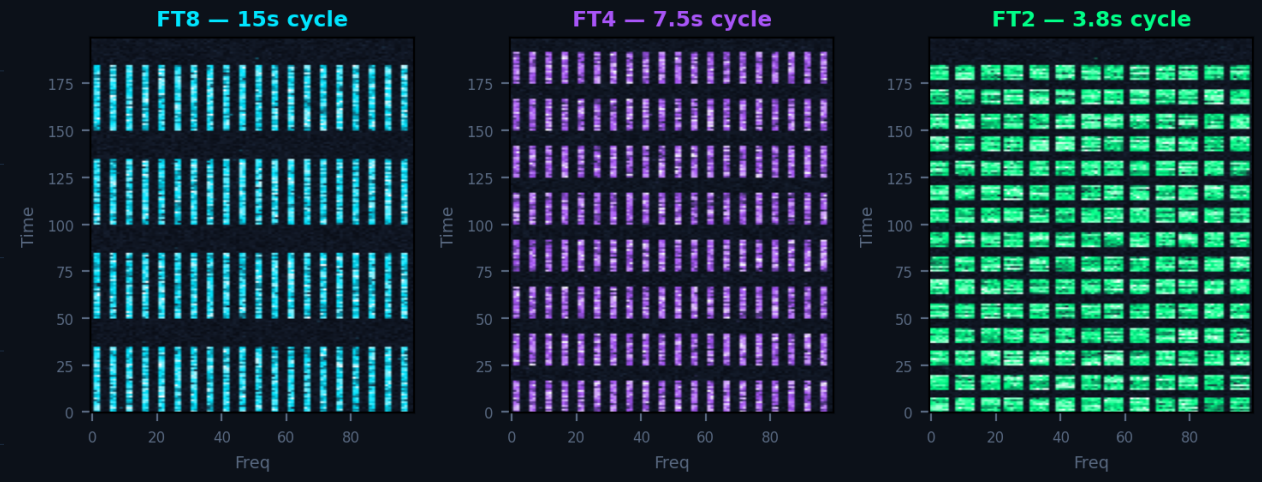
QSO SPEED COMPARISON



FT2 vs FT4 vs FT8 — FULL COMPARISON

Parameter	FT8	FT4	FT2
T/R Cycle	15 s	7.5 s	**3.8 s**
TX Duration	12.64 s	4.48 s	**~2 s**
Modulation	8-GFSK	4-GFSK	**8-GFSK**
Tones	8	4	**8**
Baud Rate	6.25 Bd	20.83 Bd	**~33 Bd**
Bandwidth	50 Hz	83 Hz	**~150 Hz**
Sensitivity	-21 dB	-17.5 dB	**-12/-13 dB**
Payload	77 bit	77 bit	**77 bit**
FEC Code	LDPC(174,91)	LDPC(174,91)	**LDPC(174,91)**
Data Symbols	58	87	**58**
Sync Symbols	21 (Costas)	18	**~16**
Full QSO Time	~60 s	~30 s	**~11 s**
QSO Rate	~60/h	~120/h	**~240/h**
Signals in 2500 Hz	~50	~30	**~16**
Band Throughput	~200 slot/min	~240 slot/min	**~256 slot/min**
Free Text	13 char	13 char	**13 char**
Fox & Hound BW	~250 Hz	~415 Hz	**~750 Hz**
Clock Accuracy	±200 ms	±100 ms	**±50 ms**

WATERFALL SIMULATION



FT2 — USE CASES & BETA TEST

DXpedition & Fox/Hound

With strong signals and massive pile-ups, FT2 allows working 200+ stations/hour.

The Fox can run 3-5 simultaneous signals, quadrupling throughput vs FT8 F&H.

Digital Contests

Complete QSOs in 11 seconds triple the contact rate compared to FT8.

Ideal for RTTY-replacement contesting where speed determines the final score.

Open Propagation

When bands are wide open and signals are strong, speed is everything.

FT2 thrives in conditions where FT8 sensitivity is overkill.

VHF/UHF Strong Signals

Local and regional contacts where SNR is not a limiting factor.

Perfect for FM-replacement digital contacts on VHF repeater bands.

WHEN NOT TO USE FT2

BETA TEST — JOIN US

We are looking for beta testers to experiment with FT2 on-air!

Help us refine the fastest digital mode ever created.

WhatsApp Group / Gruppo WhatsApp:

https://chat.whatsapp.com/HKV5pdpqqNC3Vfw97Nsl4h

CREDITS

Concept & development:	**IU8LMC — Martino, San Prisco (CE), Italy**
Team:	**ARI Caserta**
Base software:	**WSJT-X v3.0.0-rc1 (open source, GPL)**
Original protocol:	**Joe Taylor K1JT, Steve Franke K9AN**
AI tools:	**Claude (Anthropic) used for development assistance**
Test stations:	**IZ8VYF, IZ8XXE, IC8TEM, I1JQJ**

Three stations. Two bands. A mode that didn't exist before.

FT2 is real, tested, and made in Italy.

The fastest digital mode in the history of amateur radio.