

WORLD FIRST

VERIFIED QSOs

TESTED ON-AIR

IU8LMC

# FT2

## IL MODO DIGITALE PIU VELOCE MAI CREATO

Primo contatto al mondo completato il 16 Febbraio 2026

Cicli da 3.8 secondi - QSO completo in 11 secondi

4x piu veloce di FT8 - 2x piu veloce di FT4

### CONTATTI VERIFICATI SU 40m E 80m - 16 FEBBRAIO 2026

WSJT-X v3.0.0-rc1 - Modo FT2 - Log con timestamp UTC

#### 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

### SPECIFICHE TECNICHE

Modulazione	8-GFSK	Codifica FEC	LDPC (174,91)
Payload	77 bit	T/R Cycle	3.8 secondi
Bandwidth	~150 Hz	Sensitivity	-12/-13 dB S/N
Tones	8 (spaziatura ~17 Hz)	Software	WSJT-X v3.0.0-rc1 (modificato)

## DECODIUM 2.0

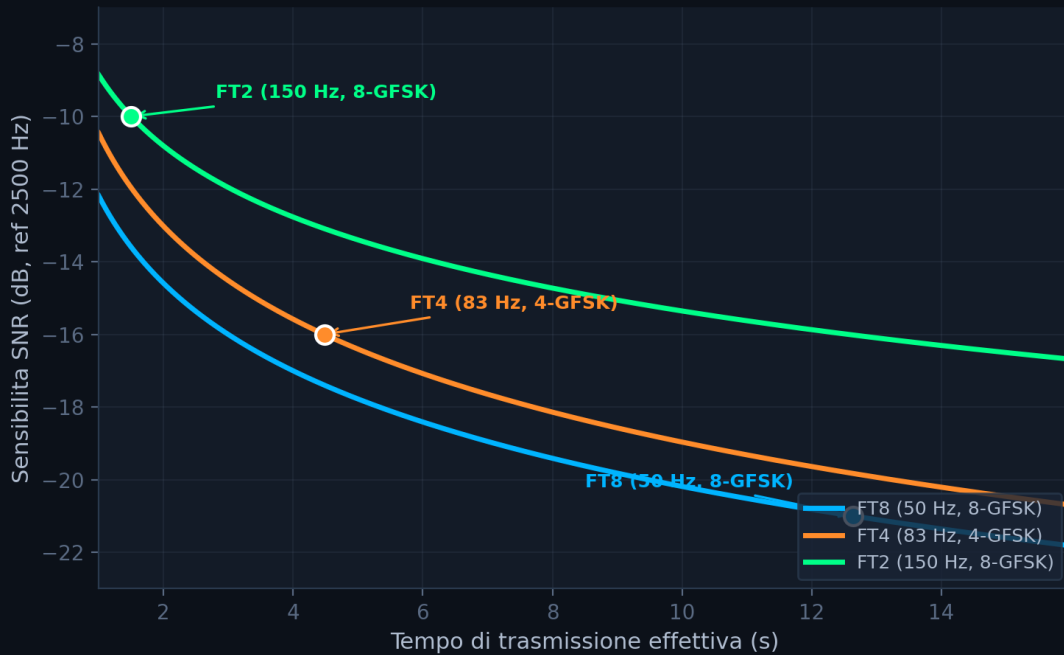
Sviluppato da IU8LMC - ARI Caserta - San Prisco, CE, Italia

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

# FT2 — TECHNICAL ANALYSIS

## SENSITIVITY vs TIME vs BANDWIDTH

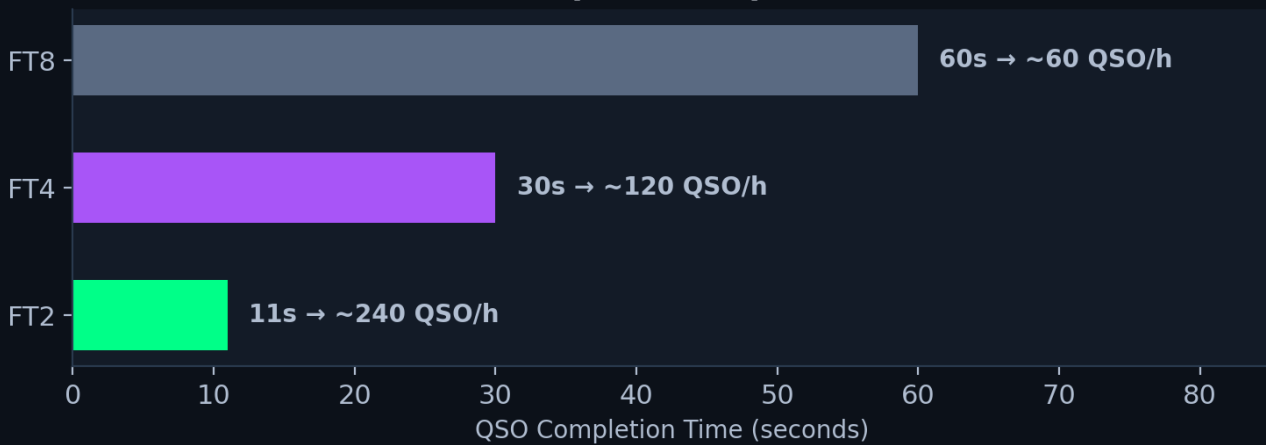
### Tempo vs Banda vs Sensibilita (FT8, FT4, FT2)



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

### 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
Modulazione	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.