



Das GRAUPNER IFS-System im Überblick

Best.-Nr.	Bezeichnung	Produktname	Abmessungen (mm)	Gewicht (g)	Spannung (V)
23600	6 Kanal Empfänger	XR-12 IFS	35 x 26 x 10	9	3,2 ... 25,0
23601	8 Kanal Empfänger	XR-16 IFS	54 x 29 x 14	19	3,2 ... 25,0
23602	10 Kanal Empfänger	XR-20 IFS	54 x 34 x 14	21	3,2 ... 25,0
23100	TX-Modul Graupner JR	XM-J1 IFS	-	-	-
23101	TX-Modul Futaba	XM-F1 IFS	-	-	-



XM-J1 IFS-Modul Best.-Nr. 23100
in GRAUPNER mc-24



XM-J1 IFS-Modul Best.-Nr. 23100
in GRAUPNER mx-22



Ab August lieferbar !!



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Advantages of the Graupner IFS system

- In seconds you can convert your existing 35 MHz or 40 MHz system into a Graupner IFS system working on the 2.4 GHz band. This has no effect at all on the settings stored in your transmitter, which are maintained in full.
- Intelligent frequency-hopping process, initiated by the receiver (i.e. where the interference actually occurs, and not on the ground, where it is irrelevant).
- Short, sharp signal pulses suppress possible interference signals.
- Data encoding with 64-bit error correction make it virtually impossible to pass incorrect data to the servo outputs.
- Frequency clashes and waiting for the frequency peg are consigned to the past.
- You can forget about the need to switch channels using Synthesizers and plug-in crystals.
- Provided that you can see your model, you will have complete control over it, ("Graupner-specific range").
- You can exploit the possibility of transmitting real-time data back to the ground from the model aircraft, helicopter, car or boat (in preparation).

Telemetry unit (in preparation)

The transmitter module features a socket for a separate telemetry display, consisting of a large, backlit, four-line LCD screen with twenty characters per line. The unit is simply attached to the existing aerial socket. Airborne sensors in your model are connected to the Graupner IFS receiver, and provide real-time information about the current status of your model. Up to 256 different sensors can be connected and addressed simultaneously via the telemetry module. The standard module displays battery voltage, temperature in the model and altitude. Additional sensors such as airspeed, various temperature indicators (exhaust gas temperature, battery temperature, ...) and many other functions will be available in due course. The pilot or operator receives audio feedback via an integral headphone socket. The telemetry unit is able to emit alarm sounds and / or human speech output if a particular event occurs (insufficient speed, insufficient height, low battery voltage ...).

Graupner IFS: Specification

Range (6-channel receiver)

- Up to 150 m on the ground, with visual contact
- Up to 500 m in the air, with visual contact

Range (8 / 10-channel receiver)

- Up to 800 m on the ground, with visual contact
- Up to 2000 m in the air, with visual contact

Frequency

- 2.4 GHz ISM band, intelligent frequency-hopping process
- Approximately spherical RF radiation pattern; no multi-element aerials required

Resolution

- 16 bits per channel (65,536 steps)
- +/- 10 ns servo signal accuracy.

Interference rejection

- One chance in 18,446,744,073,709,552,000 of being on the same frequency as another module.
- Up to 120 models can be operated simultaneously.

Aerial length

- Six-channel receiver fitted with integral aerial.
- Receiver aerial 3 cm long, completely encapsulated in the case.
- External transmitter aerial approx. 12 cm long.

Miscellaneous

- Individually programmable fail-safe function for each channel.
- Programmable servo channel assignment.
- Bi-directional telemetry data interface (exception: six-channel receiver)
- FCC, IC, CE / ETSI approval.





Summary of the GRAUPNER IFS system

Order No.	Description	Product name	Dimensions (mm)	Weight (g)	Voltage (V)
23600	Six-channel receiver	XR-12 IFS	35 x 26 x 10	9	3.2 ... 25.0
23601	Eight -channel receiver	XR-16 IFS	54 x 29 x 14	19	3.2 ... 25.0
23602	Ten-channel receiver	XR-20 IFS	54 x 34 x 14	21	3.2 ... 25.0
23100	TX module, Graupner/JR	XM-J1 IFS	-	-	-
23101	TX module, Futaba	XM-F1 IFS	-	-	-



XM-J1 IFS module Order No. 23100
in the GRAUPNER mc-24



XM-J1 IFS module Order No. 23100
in the GRAUPNER mx-22



Available August !!



Aperçu du système Graupner IFS

Réf	Désignation	Nom de produit	Dimensions (mm)	Poids (V)	Tension (V)
23600	Récepteur 6 voies	XR-12 IFS	35 x 26 x 10	9	3,2 ... 25,0
23601	Récepteur 8 voies	XR-16 IFS	54 x 29 x 14	19	3,2 ... 25,0
23602	Récepteur 10 voies	XR-20 IFS	54 x 34 x 14	21	3,2 ... 25,0
23100	TX-Modul Graupner JR	XM-J1 IFS	-	-	-
23101	TX-Modul Futaba	XM-F1 IFS	-	-	-



Module XM J1 IFS Réf 23100
dans l'émetteur Graupner Mc 24



Module XM J1 IFS Réf 23100
dans l'émetteur Graupner Mx 22



Livrable a partir du mois d'août !!!