



Congrav® OP1-S

Operator Interface for a single feeder system with Congrav® CB-E or CM-E Controller



General Information

The Congrav® OP1-S is an operator interface that is connected to a [Congrav® CB-E](#) or [Congrav® CM-E](#) controller via a serial bus link. It provides the basic functions that are required for the operation of a single Brabender gravimetric feeder.

The [Congrav® OP1-S](#) features a 5.7" colour touch screen which can be used to configure, control and set parameters. The versatile OP1-S can operate the feeder or be used to monitor/set process variables and access diagnostics.

The Congrav® OP1-S is compatible with all Brabender Technologie devices equipped with a Congrav® CB-E or CM-E control module.

The unit conforms to CE directives and exceeds all electromagnetic immunity standards.



Interfaces

Interface to Congrav® CM-E or CB-E (RS 485)

The interface to Congrav OP1-S from the control module will also provide the 24 VDC power supply for distances less than 20 m. For cable lengths greater than 20m a separate power supply is required.

Technical Specification

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Rated voltage	DC 24V (20 - 36V) by via the control module CB-E or CM-E. No separate power supply required.
Residual ripple, spikes	< 200mVss; < 300mVss
Rated output	Typ. 12 VA
Rated current	500 mA
Ambient temperature	0°C to +50°C (32°F to +122°F)
Humidity of the air	Up to 85% without condensation
Touch-screen LCD colour display	5.7" / 144 x 105 mm with LED backlight
Resolution	320 x 240 (QVGA)
Housing material	Stainless steel
Front framing	Aluminium
Mounting depth	100 mm (3.9 in) with angled plug connections
Panel cutout	160 x 135 mm (6.2 x 5.3 in)
Weight	Ca. 0.8 kg (1.7 lb)
Enclosure rating – Display only	IP65 (panel mount)
Enclosure rating	IP20
Type of menu	Symbol-based menu with virtual keys

Electromagnetic compatibility (EMC)

Requirement	Standard
ESD	EN 61000-4-2 (2001)
HF radiation	EN 61000-4-3 (2006+A1)
Burst	EN 61000-4-4 (2005)
Surge	EN 61000-4-5 (2007)
Inflow	EN 61000-4-6 (2007)
Interference voltage	CISPR 16 / EN 55011 Class A